

# UNIPRO PRODUCT CATALOGUE

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# COMPANIES

## **IKK GROUP OF COMPANIES**

The IKK Group is a major business institution, serving most of the Arab World in the Industrial, Construction and Trading fields as well as in Specialized Maintenance and Services.

After almost four decades in the business, the IKK Group has become one of the leading enterprises in the region with focus on the Construction Industry in general.

The IKK Group operates through 200 divisions, branches and outlets, spread over 13 countries, covering all major cities in the region and employing over 12,000 employees.

## **UNITECH FOR BUILDING & CONSTRUCTION MATERIALS**

Unitech for Building and Construction Materials, a member of the IKK Group of Companies was established in 1979. A "Solutions Provider" company, specialized in the: Design /Manufacturing and Trading of Building and Construction Materials.

As a declaration of its commitment to quality, the company implemented the Quality Management concept, and has acquired the ISO 9001:2008 Quality Management System, in addition to being a golden member of the U.S.Green Building Council (USGBC).

## **UNITED PROFESSIONAL FOR BUILDING AND CONSTRUCTION MATERIALS**

Unipro United Professional for Building and Construction Materials, an affiliate of Unitech, is a member of the IKK Group of Companies (IKK). A versatile range of products is offered by Unipro to suit the needs of several applications whenever and wherever needed. In line with its major effort to enhance its line of products has lead to the establishment of a specialized firm for building materials.

UNIPRO adopts advanced levels of technical construction materials and the highest of technical standards to ensure excellent work progress and to maintain sustainable development.

As a declaration of Unitech's commitment to quality, UNIPRO has implemented the Quality Management concept, and has acquired the ISO 9001:2008 Quality Management System. The company's strength lies in its solid structure and management style by observance of professional standards.

The company's core values are based on excellence, Integrity and servicing with highly effective business operation.

UNIPRO's basket of building and construction products, backed by engineering and technical support of Unitech, includes a wide variety to suit several applications. We consider safety factors before identifying suitable systems and products, taking into consideration several circumstances, thus our concern is to provide a complete solution to our clients rather than selling the product itself.

# .1. CONCRETE WORK SUPPLIES

- 1- CONCRETE ACCESSORIES
- 2- PVC WATERSTOPS
- 3- HARDENED STEEL NAILS FOR CONCRETE
- 4- ALUMINUM LEVELS



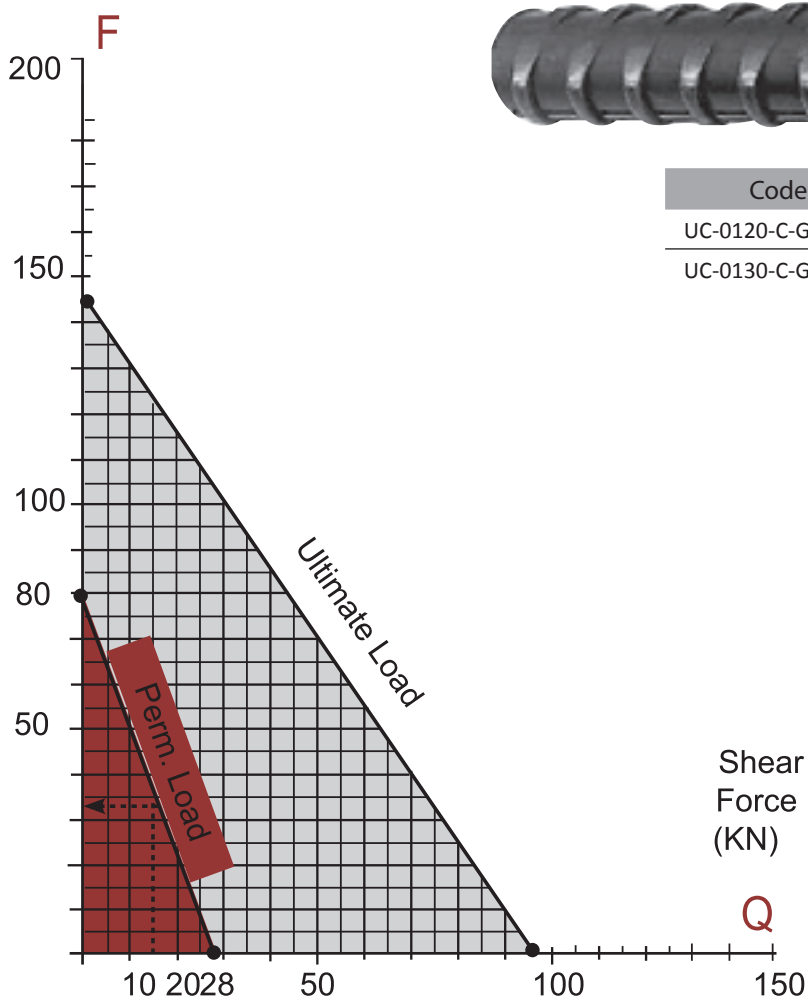
# CONCRETE ACCESSORIES

www.unipro-ikk.com

## TIE RODS

- Form tie rods DG 15/17 made from mild steel and steel EN 8 are threaded along their entire length. Natural finish with anti rust coating.
- Core diameter = 15mm (outer diameter= 17mm).
- Weight 1.44 Kg/m
- Permissible load (breaking and working load) as per DIN 18216 |  $F_{perm.} = 80-90$  KN
- Permissible shear load (breaking and working load) |  $Q_{perm.} = 28$  KN
- Ultimate tensile load (breaking and working load) |  $F_{ult.} = 146$  KN
- Yield force  $F_{yield} = 121$  KN
- Rupture elongation  $E_{rup} = 15\%$
- Safety regulation: Do not weld and heat tie rods because there will be danger of cracking!

Tensile Force (KN)



Code	Size
UC-0120-C-GSTRD3	DG 15/17 x 3 LM
UC-0130-C-GSTRD6	DG 15/17 x 6 LM

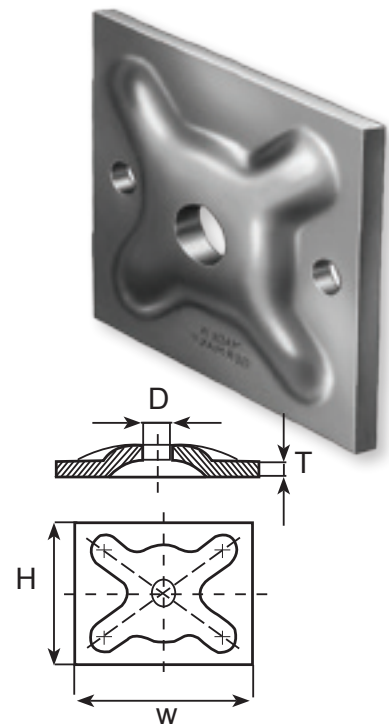
# CONCRETE ACCESSORIES

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## GALVANIZED WALER PLATES

Plates are made from steel ST 37 to accommodate tie rods DG 15/17.  
 To be used with wing nuts or hexagon nuts.  
 For use in both timber and steel formwork.  
 Zinc plated.  
 $\varnothing D = 20 \text{ mm}$ .

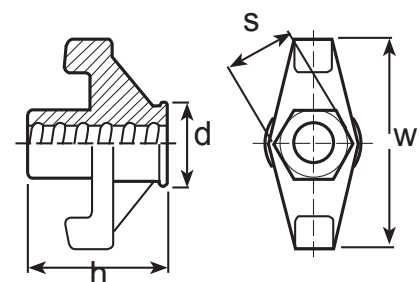
Code	Size (W x H x T)	Permissible load (KN)
UC-0160-C-GPRWR6	120 x 120 x 6 mm	80
UC-0170-C-GPRWR8	120 x 120 x 8 mm	90



## GALVANIZED WING NUTS / SW 27

Wing nuts are made of cast iron to be used in conjunction with waler plates for securing tie rods in formwork applications.  
 For use in both timber and steel formwork.  
 Zinc plated.  
 $h = 60 \text{ mm}$ ,  $d = 33 \text{ mm}$ ,  $w = 90 \text{ mm}$ ,  $s = 27 \text{ mm}$ .

Code	Permissible Load (KN)
UC-0140-C-GWNT35	80 KN



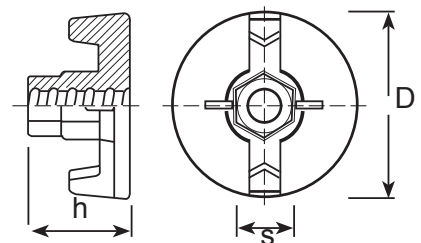
# CONCRETE ACCESSORIES

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## GALVANIZED WALER NUTS / SW 27

Waler nuts are made from cast iron to accommodate tie rods DG 15/17.  
For use without waler or counter plates in both timber and steel formwork.  
Zinc plated.  
h= 55 mm, s= 27 mm.

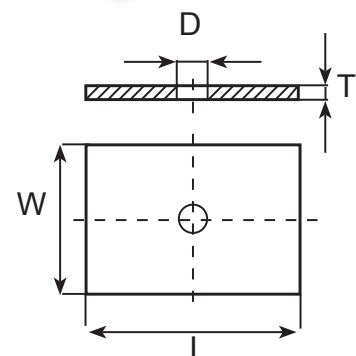
Code	Base Diameter D (mm)
UC-0175-C-GAN30	70 mm
UC-0176-C-GAN50	100 mm



## GALVANIZED COUNTER PLATES / PLAIN

Counter plates made from steel ST 37.  
To accommodate tie rods DG 15/17.  
To be used in both timber and steel formwork with wing or hexagon nuts.  
Hot-dip galvanized.  
Ø D= 20mm.

Code	Size (L x W x T)
UC-0145-C-GCP	140 x 70 mm x 8 mm



# CONCRETE ACCESSORIES

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## HEXAGON NUTS / SW 30

For use with tie rods DG 15/17 in both timber and steel formwork with waler or counter plate.

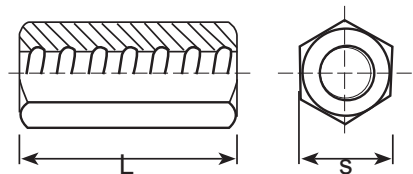
50 mm length to be used also as bar connector.

To be operated by means of a spanner.

Zinc plated.

Hex size  $s = 30$  mm

Code	Size
UC-0150-C-GJCP30	DG15/17 x 30 mm
UC-0155-C-GJCP50	DG15/17 x 50 mm



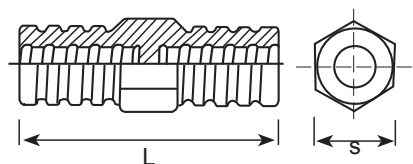
## WATER STOPPERS OR BARRIERS / SW 36

This malleable cast iron - Grade BM 30- 06 Grey iron part is used together with tie rods DG 15/17 for the construction of watertight concrete walls. It is very often the case that customers demand the tie rods to be connected up to a so-called waterstop in the middle of the wall.

Zinc plated.

Hex size  $s = 36$  mm.

Code	Size L x S	Permissible Load (KN)
UC-0180-C-SWB116	DG15/17 x 116 mm	80-90 KN



These systems are used for basement walls or tanks where a watertight structure is required. After the concrete has cured the bars are unscrewed from the watertight coupling, formwork cones removed and the holes are then grouted with mortar or injected with polyester resin.

# CONCRETE ACCESSORIES

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## PVC TUBES - THRUTY SLEEVES

Rigid PVC tube, supplied in length of 2 m, which can be easily cut to size on site. To be used as an expandable sleeve over tie-rods, facilitating their removal and also acting as a spacer to give correct shutter position. Tubes allow the recovery of the tie rods by preventing contact with the concrete. Length to be cut depends on wall thickness.  
(length= wall thickness minus 2 cm)

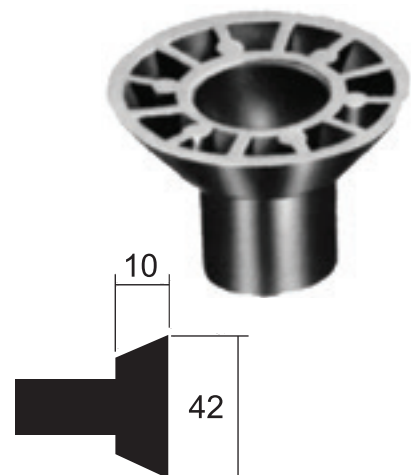


Code	Inner Diameter (mm)	Outer Diameter (mm)	Length (mm)
UC-200-C-PVT222	22	26	2000

## PVC THRUTY CONES

Thru cones used at the ends of thru sleeves and can be easily extracted after removal of the formwork, to form a chamfered recess for subsequent grouting.

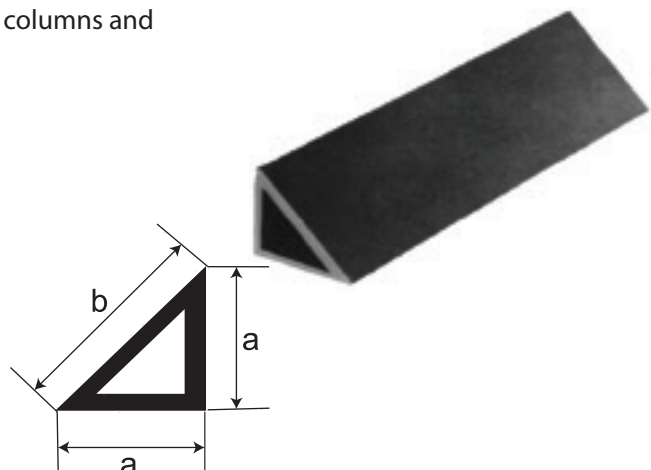
Code	For Sleeve Inner (mm)	Recess Depth (mm)
UC-0190-C-PVCN22	22	10



## PVC CHAMFER STRIPS

PVC profiles suitable for forming chamfered corners to columns and beams. Chamfers are re-usable.

Code	Dimension A x Length
UC-0020-C-PCH102	10 mm x 2 LM
UC-0030-C-PCH152	15 mm x 2 LM
UC-0040-C-PCH202	20 mm x 2 LM
UC-0050-C-PCH252	25 mm x 2 LM
UC-0060-C-PCH302	30 mm x 2 LM



# CONCRETE ACCESSORIES

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## PVC CHAIR SPACER

This spacer is the most popular spacer for horizontal placed reinforcement in slabs and beams. It has good stability and can be used with various bar diameters due to its concave seat. Designed for light reinforcement in slabs and beams.

Code	Size
UC-0510-C-PCHS25	25 mm
UC-0520-C-PCHS30	30 mm
UC-0530-C-PCHS40	40 mm
UC-0540-C-PCHS50	50 mm



## PVC CHAIR SPACER

Code	Size
UC-0610-C-PCLS25	25 mm
UC-0620-C-PCLS30	30 mm
UC-0630-C-PCLS40	40 mm
UC-0640-C-PCLS50	50 mm
UC-0650-C-PLSS75	75 mm



## PVC WHEEL SPACER

Wheel spacers for universal use. Clamping retention lugs for different steel diameters. Extra-wide support area reduces possibility of tipping over. Open style design does not interrupt concrete flow. External ribs for minimal formwork contact.

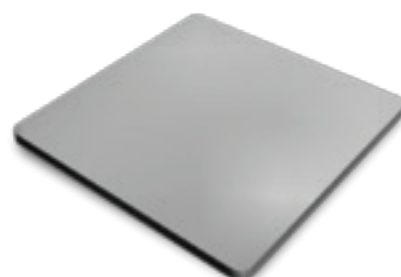
Code	Size
UC-0610-C-PWLS20	20 mm
UC-0620-C-PWLS25	25 mm
UC-0630-C-PWLS30	30 mm
UC-0640-C-PWLS40	40 mm
UC-0640-C-PWLS50	50 mm
UC-0660-C-PWLS75	75 mm



## SHIM PAD

For assembling precast concrete parts and facade elements.

Code	Thickness	Size
UC-0330-C-PSHM02	2 mm	70 x 70 x 2 mm
UC-0340-C-PSHM03	3 mm	70 x 70 x 3 mm
UC-0350-C-PSHM04	5 mm	70 x 70 x 5 mm
UC-0370-C-PSHM10	10 mm	70 x 70 x 10 mm

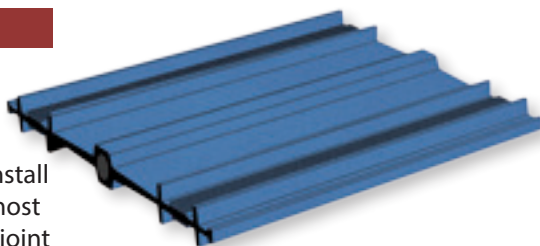


# PVC WATERSTOPS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## COMPOSITION AND MATERIALS

UNIPRO WaterStop is a specially formulated Polyvinyl Chloride (PVC) compound. Flexible, resilient, tough, chemically inert, is not affected by weathering, low temperatures, or constant immersion in water. It will withstand rough treatment during installation, yet is relatively easy to install and splice. Unitech WaterStop is unaffected by concrete additives and most water solutions of organic chemicals. It has the ability to accommodate joint movements and at the same time prevent water passage through the joints.



## USAGE

UNIPRO WaterStop is designed for use in any concrete structure which contains joints and is subjected to a hydrostatic load on one face of the structure. It prevents water movement through concrete joints in water reservoirs, canals, dams, sewage treatment plants, bridges, stadiums, basements, floor slabs, parking garages, and similar structures.

## PROPERTIES

UNITECH WaterStop is unaffected by alkalis, acids, hydrocarbons, oxidation, sewerage, and most water solutions of organic chemicals. It is extremely resistant to abrasion, corrosion, and aging. For physical properties see Table 1.

## AREAS OF APPLICATION

### STRUCTURAL ENGINEERING

- Bridges
- Industrial buildings
- Power stations

### WATER EXCLUDING

- Basement areas
- Underground car parks
- Tunnels
- Retaining walls
- Suspended slabs
- Pits
- Roof slabs

### WATER RETAINING

- Sewage treatment plants
- Water treatment plants
- Swimming pools
- Reservoirs
- Dams and Spillways
- Bund walls

## PHYSICAL PROPERTIES

PROPERTIES	TEST METHOD	NOMINAL VALUES
Specific Gravity	ASTM D 792	1.4±0.1 g/cc
Tensile Strength	ASTM D 638 DIN 53455	13.7±1 MPa 13.7 N/mm <sup>2</sup>
Ultimate Elongation	ASTM D 638 DIN 53455	300% 300%
Hardness-Shore - A	ASTM D 2240 DIN 53505	75±5 75±5
Stiffness in Flexure	ASTM D 747	4.14 MPa 4.14 N/mm <sup>2</sup>
Tear Resistance	ASTM D 624	285 lb/in.min 50KN/m
Water Absorption - 24 hours - 48 hours	ASTM 570 ASTM 570	0.82% 0.320%
Resistance to Chemicals Density	ASTM 570	Excellent to inorganic solutions: salts, hydrocarbons, acids, and alkalis



# PVC WATERSTOPS

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[www.unipro-ikk.com](http://www.unipro-ikk.com)  
.....

## INSTALLATION OF THE WATERSTOPS

The waterstops is to be installed together with the reinforcement and attached to the same. Auxiliary aids:

- a- Waterstops clips and binding wire with a spacing of approximately 30 cm.
- b- Factory-installed brass lugs and binding wire.

Stabilized construction joint waterstops with round steel embedded in the waterstop every 10 cm or external round steel clips at about the same spacing offer significant advantages during installation. The latter make the use of waterstop clips superfluous. External waterstops are to be placed on the sub-base or to be fixed on the formwork before the rebars are installed.

## CAUTION

Despite careful storage, attention shall be paid to the waterstops being free from any soiling during installation. During installation, there is a risk of the waterstops being damaged by contact with sharp edges of the rebars.

Before placing the concrete, the waterstops shall be checked once again for cleanliness and proper installation, i.e.

- The absence of any dirt (e.g. concrete remainders, sawdust, crown caps and other foreign objects),
- Secure fastening,
- Alignment with respect to the joint, and
- Distance from the rebars.

It is advisable to fix the waterstop in place with a preliminary layer of concrete. During compaction, the vibrating head shall not come into contact with the waterstop.

When removing the formwork it is of prime importance that the waterstop is neither damaged nor loosened or detached from the fresh concrete.

This is especially important for external waterstops. If in spite of all cautionary measures - the waterstop is still found to be defective areas shall be marked and immediately repaired in an appropriate way.

External waterstops shall be secured in place before backfilling the working space. During prolonged interruptions of the construction work, the waterstops shall be protected against any external influence.

This protection can be achieved by covering up the waterstops with a formwork box.



# PVC WATERSTOPS

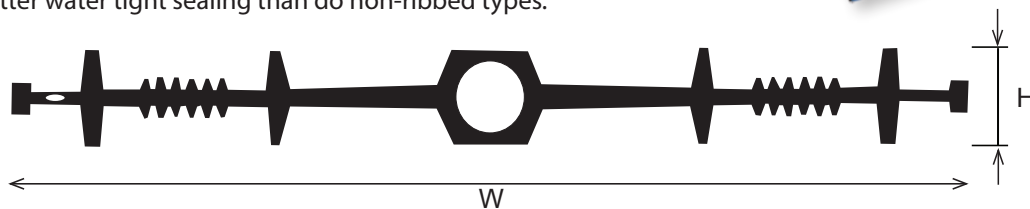
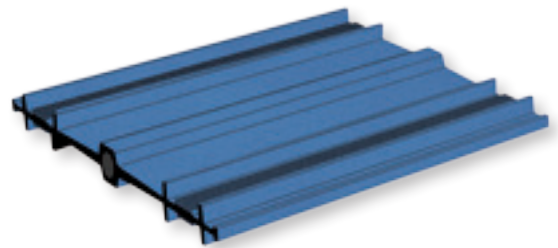
[www.unipro-ikk.com](http://www.unipro-ikk.com)

## TYPES OF WATERSTOPS

Two main types of profiles are available. Unitech Centerstop for centrally placed applications and Unitech Outerstop for externally placed applications. These profiles are available in rolls with separate intersections supplied to simplify and minimise on-site fabrication.

### 1- Center ribbed type with center bulb:

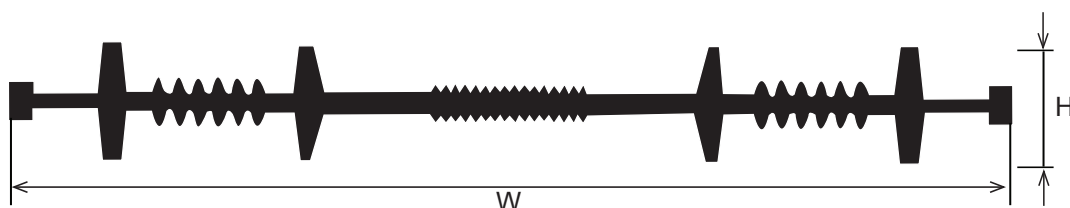
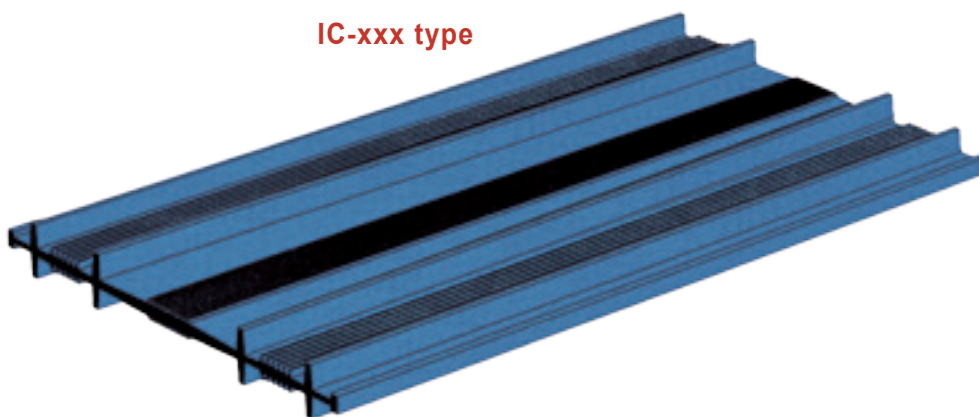
Center ribbed type with center bulb waterstop profiles are fixed generally on the middle of the slab or wall joint of the concrete structure. This profile provides a barrier to water trying either to enter or leave the structure. The central bulb enables it to be used in joints where movement may occur. It can be used in horizontal and vertical applications for expansion, construction joints. The bulb works with both lateral and transverse movement, and the ribs provide better water tight sealing than do non-ribbed types.



### 2- Center Ribbed type without center bulb :

This type is designed for horizontal and vertical construction joints where an economical and easy to install product is required.

IC-xxx type



# PVC WATERSTOPS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## TYPES OF WATERSTOPS

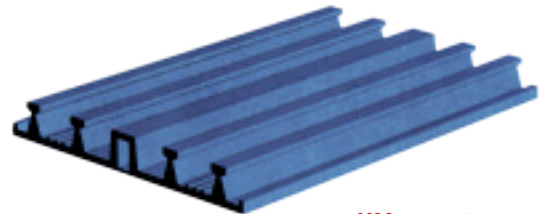
Two main types of profiles are available. Unitech Centerstop for centrally placed applications and UNIPRO Outerstop for externally placed applications. These profiles are available in rolls with separate intersections supplied to simplify and minimise on-site fabrication.

## OUTERSTOP PROFILES

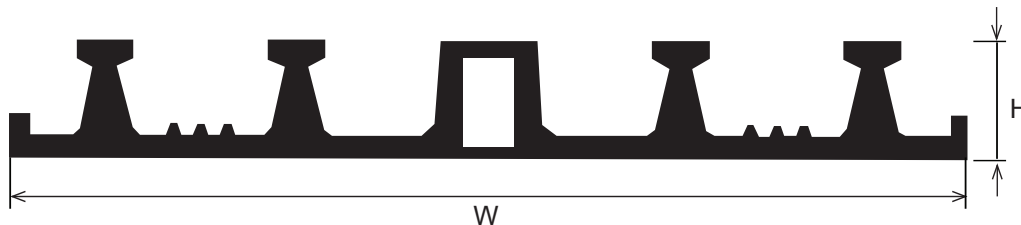
Externally placed profiles are designed for use in floor and basement areas in horizontal and vertical joints. UBI Outerstop profiles are located on the external face to the concrete. The specially designed keys enable compaction to be obtained around the waterstop, bonding the concrete and waterstop together forming a positive water barrier.

### 1- Outer Ribbed type with v-bulb :

For use in expansion, construction and contraction joints, the flat top bulb section allows support for any joint filler and allows for any movement in the structure. The bottom of the bulb has a "V" shaped notch so that should the joint open beyond the capacity of the PVC bulb, the bottom of it will tear along the notch and permit the bulb to open whilst still maintaining the water barrier.

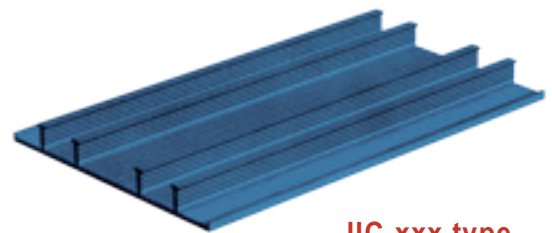


IIX-xxx type

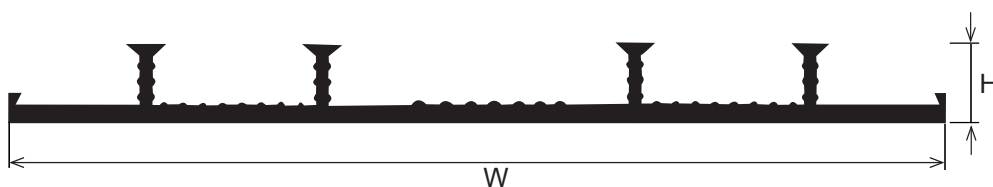


### 2- Outer Ribbed type without V-bulb:

It is important that all waterstops are held securely during the concrete pour and that the concrete is properly compacted to remove voids and porous areas. For horizontal applications where an already stable support exists, UNITECH outerstop profiles generally require no fixing as they are laid centrally along the joint being formed. For use in construction and contraction joints, where no movement is expected



IIC-xxx type



# PVC WATERSTOPS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## INTERSECTIONS

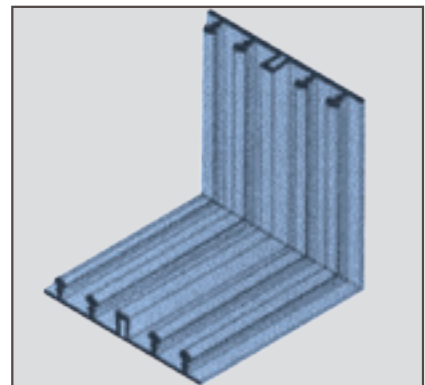
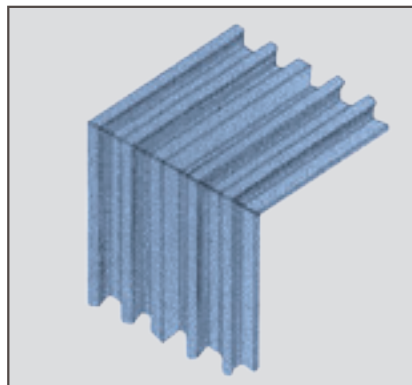
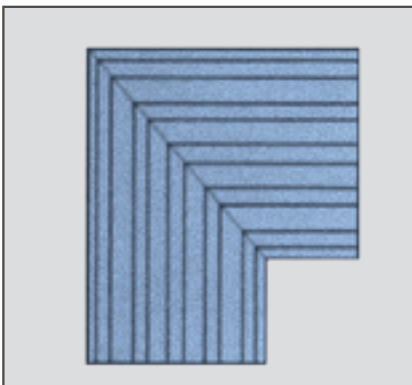
A range or prefabricated intersections, both standard and specials are available for each UBI profile.

These are factory made and are usually very difficult to make in the field. By using factory-made intersections, the contractor has to only make straight joining welds on site.

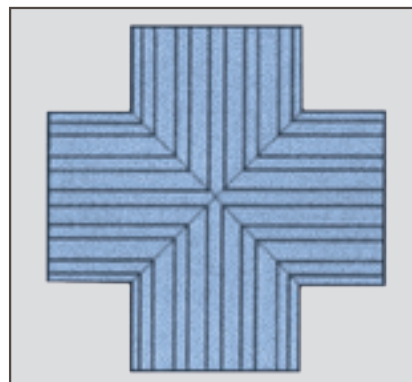
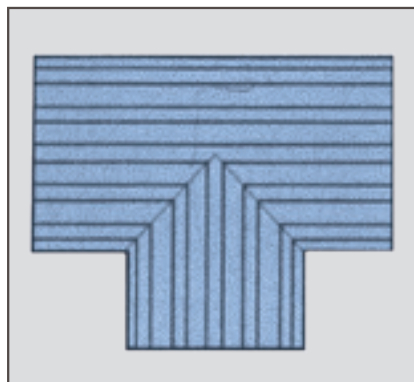
The standard leg length is 250mm. Factory welded units to suit lift pits, etc. are also available.

## Intersection pieces

A range of intersection pieces is available for each profile. The standard leg is 250mm.



Two way flat — Two way vertical outside profile — Two way vertical inside profile



Three way flat — Four way flat

# HARDENED STEEL NAILS FOR CONCRETE



DON QUICHOTTE

[www.don-quichotte.nl](http://www.don-quichotte.nl)

## TYPICAL PROPERTIES

- Manufactured from special high carbon steel.
- Strict quality control during manufacturing process.
- Extreme hardness (>52 HRC) and flexibility (bending resistance 900).
- Easy hammering-in and higher pull-out value.
- Specially hardened for maximum safety according to DIN 7255.
- Hardened and tempered on modern fully automatic equipment in a continuous process.
- Strict quality control during the manufacturing process.
- High hardness and flexibility.
- Safe and guaranteed.
- Made in Holland.



## TECHNICAL PROPERTIES

### PRODUCT SIZE

UNI - CODE	SIZE Ø X L (MM)	QUANTITY (BOX/PKT)
QU-050-30496	Fix Pin 2.0 x 20	200
QU-080-30509	Fix Pin 2.0 x 25	200
QU-095-30541	Fix Pin 2.5 x 25	200
QU-110-30648	Fix Pin 3.0 x 30	200
QU-140-30664	Fix Pin 3.0 x 40	120
QU-170-30680	Fix Pin 3.0 x 50	80
QU-200-30699	Fix Pin 3.0 x 60	70
QU-230-86764	Fix Pin 3.0 x 70	70
QU-260-86588	Fix Pin 3.4 x 80	70
QU-290-87054	Fix Pin 4.2 x 100	40

Qty per box = 100 nails.



# ALUMINUM LEVELS



BMI

[www.bmi.de](http://www.bmi.de)

BMI stands for innovative manufacturing technology of spirit levels designed for strenuous work. BMI ensures a long working life and high precision for your tasks apart from an appealing optical design. BMI Worldwide patented manufacturing processes ensure constant and consistent top quality.

## ALUMINUM ECOLINE

For cost-aware users. Robust, smooth aluminum profile, yellow powder coated (689 P-yellow).

### ECOLINE

BI-0010-C-689030Y	30cm
BI-0020-C-689040Y	40cm
BI-0030-C-689050Y	50cm
BI-0040-C-689060Y	60cm
BI-0050-C-689080Y	80cm
BI-0055-C-689090Y	90cm
BI-0060-C-689100Y	100cm
BI-0070-C-689120Y	120cm
BI-0080-C-689150Y	150cm
BI-0100-C-689200Y	200cm



## 690E/690ES/690EM/690P EUROSTAR

### EUROSTAR

BI-0130-C-690050S	50cm
BI-0160-C-690100S	100cm
BI-0170-C-690120S	120cm



- Patented high-tech laser marked vials
  - Laser-marked
  - Good viewing of the vial owing to its magnifying effect
  - 30 years BMI guarantee for vial durability
- All round model suitable for every application; it is sturdy, easy to-grip and smooth aluminum profile.  
Available in multiple designs:

**With 1 horizontal and 1 vertical vial; silver anodized (690 E)**

**With 1 horizontal and 2 vertical vials, silver anodized (690 ES)**

**With 1 horizontal and 1 vertical vial and powerful magnets; silver anodized (690 EM)**

**With 1 horizontal and 1 vertical vial; yellow powder coated (690 P)**

## .2. INSULATION AND PROTECTION SOLUTIONS

- 1- GEOTEXTILES
- 2- EXTRUDED POLYSTYRENE THERMAL INSULATING BOARDS
- 3- BITUMEN IMPREGNATED WOOD FIBER FILLERS & PROTECTION BOARDS
- 4- POLYETHYLENE ROLLS
- 5- POLYPROPYLENE PROTECTION BOARDS



# GEOTEXTILES

.....  
[www.unipro-ikk.com](http://www.unipro-ikk.com)  
.....

UNITECH Geotextiles are a natural choice when designing building and construction works including road, ground, drainage and filtration systems, hydraulic works, waste disposal sites and water purifying plants.



Road Works



Pavement Works



Hydraulic Works

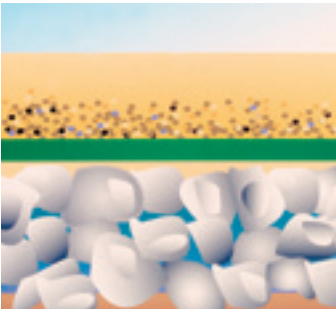


## FUNCTIONS:

UNITECH Geotextiles are a natural choice when designing building and construction works including road, ground, drainage and filtration systems, hydraulic works, waste disposal sites and water purifying plants.

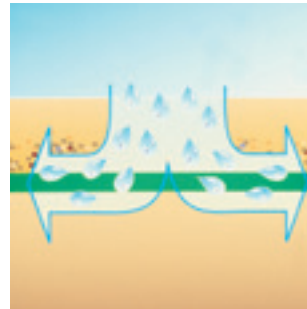
### SEPARATION:

Form an effective barrier between the different layers of material, i.e. soil, sand and gravel.



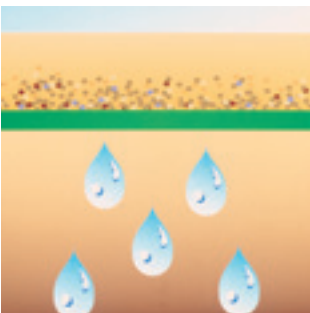
### FILTRATION:

Allow water to pass unobstructed while particles such as silt and sand are retained.



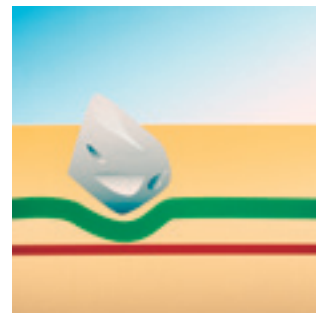
### DRAINAGE:

Ensure that water is transported inside the geotextile in order to drain all water from the construction.



### PROTECTION:

Resist considerable local stresses as well as inflicted stresses.



# GEOTEXTILES

www.unipro-ikk.com

## FUNCTIONS

UNITECH Geotextiles																												
The recommended grades in the table below are specified under normal conditions.		F-10	F-20	F-22	F-25	F-30	F-31	F-32	F-35	F-40	F-46	F-50	F-55	F-60	F-200M / F-23M	F-300M	F-400M	F-45M	F-600M / F-650M	F-800M	F-1000M	F-1200M	Separation	Filtration	Drainage	Protection	Reinforcement	
	<b>ROAD WORKS</b>																											
Permanent Roads				•	•			•	•		•			•										•	•			
Temporary Roads																							•	•				
Parking Areas (Heavy Vehicles)							•	•					•										•	•				
Parking Areas (Normal Vehicles)					•	•																	•	•				
Roads Widening					•	•		•	•														•	•				
Airports							•		•			•											•	•				
Railways									•	•		•		•		•		•					•	•				
Paths and Walking Areas		•	•																				•	•				
<b>CONSTRUCTION WORKS</b>																												
Foundations			•	•																			•					
Concrete Floors	•	•																					•					
Impact Sound Suppression															•								•					
Roof Constructions	•	•		•										•	•								•	•	•	•		
Retaining Walls				•	•																		•				•	
<b>GROUND SYSTEMS</b>																												
Pipes and Trenches		•	•																				•					
Storage Areas		•	•	•																			•					
Sport Grounds						•	•																•	•				
Slopes (Erosion Control)															•	•		•					•				•	
<b>DRAINS</b>																												
Drainage Pipes	•	•																							•			
Drainage Trenches - Fascines		•	•	•											•										•			
Surface Drains		•	•	•																					•			
Building Drains		•																										
<b>HYDRAULIC WORKS</b>																												
Coastal Protection																•	•	•	•	•	•	•			•			
Harbour Constructions																		•						•				
River Banks and Canals																•	•							•				
Artificial Lakes																•								•				
Water Reservoirs															•	•										•		
<b>WASTE DISPOSAL</b>																												
Drainage Layers				•	•										•	•	•							•	•	•		
Protection Layers																		•	•	•	•	•				•		



# GEOTEXTILES

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UNITECH Geotextiles			G-100	F-2B	F-10	F-20	F-22	F-25	F-30	F-31	F-32
Physical Properties											
Weight	EN ISO 9864	g/m <sup>2</sup>	100	125	80	100	120	130	150	165	175
Thickness at 2 kpa	EN ISO 863-1	mm	0.6	0.7	0.6	0.6	0.7	0.8	0.8	0.8	0.9
Mechanical Properties											
Static Puncture (CBR-test)	EN ISO 12236	N	940	1500	800	1100	1500	1600	1800	1800	2000
Elongation	EN ISO 12236	%	55	50	50	50	50	50	50	50	50
Tensile Strength Long. dir.	EN ISO 10319	KN/m	4.0	8.0	4.5	7.0	8.0	10.0	12.0	12.0	13.0
Tensile Strength Trans. dir.	EN ISO 10319	KN/m	5.0	9.0	4.5	7.0	8.0	10.0	11.0	12.0	13.0
Elongation st Break	EN ISO 10319	%	32/45	35/45	40/50	40/55	40/55	45/55	40/50	40/50	45/50
Dynamic cone drop	EN ISO 13433	mm	40	28	>50	35	35	32	30	28	28
Hydraulic Properties											
Permeability at 50 mm WH	EN ISO 11058	m/sec	0.08	0.07	0.10	0.07	0.07	0.07	0.05	0.05	0.04
Permittivity at 50 mm WH	EN ISO 11058	sec <sup>-1</sup>	1.6	1.5	2.0	1.4	1.4	1.4	1.0	1.0	0.8
Water Flow at 50 mm WH	EN ISO 11058	l/sec/m <sup>2</sup>	85	75	100	70	70	70	50	50	40
Velocity Index at 100mm WH	EN ISO 11058	m/sec	8.0	10.0	0.16	0.12	0.12	0.12	0.08	0.08	0.07
Water Flow at 100 mm WH	EN ISO 11058	l/sec/m <sup>2</sup>	140	120	160	120	120	120	80	80	70
Transmissivity	EN ISO 12958	10 <sup>-6</sup> m <sup>2</sup> /sec	0.5	0.6	0.1	0.3	0.6	0.6	0.8	0.8	0.8
Water Flow Capacity	EN ISO 12958	l/hour/m	2	2	0.5	1	2	2	3	3	3
Pore Size, 90%	EN ISO 12956	microm	100	85	100	95	70	70	85	85	85
Standard Dimensions											
Width		m	5.0	5.0	4/5	4/5	4/5	4/5	4/5	4/5	4/5
Length		m	100	100	100	100	100	100	100	100	100
Roll Diameter		cm	28	28	25	26	28	30	32	32	32
Roll Weight at Maximum Roll Width		kg	55	75	45	55	65	70	80	95	95

# GEOTEXTILES

[www.unipro-ikk.com](http://www.unipro-ikk.com)

UNITECH Geotextiles	F-35	F-40	F-46	F-50	F-55	F-60	F-200M	F-300M	F-400M	F-45M	F-600M	F-650M	F-800M	F-1000M	F-1200M
<b>Physical Properties</b>															
Weight	225	250	275	310	340	400	200	300	400	500	600	650	800	1000	1200
Thickness at 2 kpa	1.1	1.4	1.4	1.6	1.6	1.8	2.0	3.0	4.0	3.4	5.0	5.0	6.0	7.0	8.0
<b>Mechanical Properties</b>															
Static Puncture (CBR-test)	2600	3100	3700	3890	4350	5550	1900	3890	4300	5200	6000	6000	800	1000	14000
Elongation	50	50	50	50	50	50	60	60	60	60	60	65	65	65	75
Tensile Strength Long. dir.	17.3	18	20	23	25	30	12	20	23	26	30	32	30	34	40
Tensile Strength Trans. dir.	17.3	18	20	23	25	30	12	20	25	36	41	40	60	75	110
Elongation at Break	43/55	50/60	45/55	50/55	50/55	55/60	65/80	65/65	70/65	67/60	80/60	90/65	70/60	90/60	110/65
Dynamic Cone Drop	22	20	13	15	10	8	20	16	11	9	5	6	0	2	0
<b>Hydraulic Properties</b>															
Permeability at 50 mm WH	0.03	0.04	0.03	0.03	0.03	0.02	0.08	0.05	0.05	0.04	0.03	0.03	0.03	0.02	0.015
Permittivity at 50 mm WH	0.6	0.8	0.6	0.6	0.6	0.4	1.7	1.0	1.0	0.8	0.6	0.6	0.5	0.4	0.3
Water Flow at 50 mm WH	30	40	30	30	30	20	80	50	50	45	30	30	25	20	15
Velocity Index at 100mm WH	0.06	0.07	0.05	0.05	0.05	0.03	0.13	0.07	0.07	0.06	0.05	0.05	0.04	0.03	0.02
Water Flow at 100 mm WH	60	70	50	50	50	30	135	70	70	60	50	50	40	35	25
Transmissivity	0.7	1.0	1.0	1.0	1.0	1.0	2.9	4.0	5.3	4.3	8.0	5.7	15	15	20
Water Flow Capacity	3	4	4	4	4	4	12	15	20	15	30	20	50	50	70
Pore Size, O 90%	70	70	65	65	65	65	100	70	80	70	70	70	80	70	60
<b>Standard Dimensions</b>															
Width	4/5	4/5	5.0	5.0	5.0	5.0	4/5	4/5	5.0	5.0	5.5	5.5	5.5	5.5	5.5
Length	100	100	100	100	100	100	100	100	100	100	100	50	50	50	50
Roll Diameter	34	36	39	42	44	60	48	60	60	59	80	56	58	69	72
Roll Weight at Maximum Roll Width	120	130	145	160	175	205	105	155	205	255	335	185	225	265	335

# EXTRUDED POLYSTYRENE THERMAL INSULATING BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

Our range of products are manufactured to comply to the requirements of ASTM C-578-95 and BS EN 13164:2012+A1:2015

## EXTRUDED POLYSTYRENE INSULATED BOARDS FOR ROOF, CAVITY WALLS AND FLOOR APPLICATION

### THE SYSTEM

#### THE SYSTEM

Insulation system reduces the heat transfer through the envelope of a building.

Extruded polystyrene boards have closed cells with common sides and is produced with fully automated extrusion process in accordance with international specifications and standards. Extruded polystyrene has a high resistance to water absorption. The manufacturing process, combined with intrinsic qualities of the static component thermoplastic material gives it predictable performance and high insulating value.

#### ROOF INSULATION

Roof Insulation mostly known as the inverted roof concept or upside-down roofing, succeeds in insulating both the waterproofing membrane and the slab from extreme thermal stress.

#### WALL INSULATION

Interior Wall Insulation : It is used where existing buildings require insulation, building with special exterior finishes and building with intermittent air conditioning. The Internal lining (Wall fix) can be used either with adhesives or by mechanical fasteners.

Cavity Wall Insulation – It is an advantage where an external brick of any type and finish is required. Also, for any type for air conditioned buildings or GRC panels with adhesive or mechanical fasteners.

Exterior Insulation - It is most efficient way of insulating buildings without interrupting structure elements. It can be fixed behind granite or GRC panels with adhesive or mechanical fasteners.

#### FLOOR INSULATION

Floor finish is particularly important in the hot weather areas, especially where the soil temperature is very high. Good floor insulation helps reduce heat flow through the floor into air conditioned buildings. Extruded Polystyrene boards are efficient due to their high compressive strength, high resistance to water absorption, moisture penetration and low thermal conductivity.

# EXTRUDED POLYSTYRENE THERMAL INSULATING BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## ADVANTAGES

Thermal Insulation Boards have several advantages, amongst are:

- Closed and uniform cell structure • Extremely low moisture absorption
- Very good mechanical strength • Long-term high insulation, performance efficiency
- Good dimensional stability • High resistance to temperature cycling
- High resistance to ageing • Very high resistance to water absorption.
- Does not require a vapor barrier. • Not affected by cavity masonry wall construction.
- High long-term insulation value. • Protects the inner walls from condensation.

Strong rigid board, not easily damaged • Easy to handle, cut and install. • The boards are specially long to help cover more areas and therefore reduce installation time and cost. • Available in a wide range of thicknesses. • It has Tongue and Groove profiles on all four edges to eliminate thermal bridging. • It does not rot or settle. • It is extremely cost-effective in cavity wall applications.

## CHARECTERSTICS

Property (Average) <sup>1</sup>	Test Standard <sup>2</sup>	Units	35-36	26	21	40	45	48
Density, min.	DIN 53420 ASTM D-1622	kg/m <sup>3</sup> lbs/ft <sup>3</sup>	32-35/36 2.2	26 1.6	21 - 24 1.3	40 2.5	45 2.8	48 2.9
Thermal conductivity <sup>3</sup> fresh as manufactured at 4.4°C (40°F) mean test temperature	DIN 52612 or DIN 52616	W/m.K Btu.in/ft <sup>2</sup> .hr.°f	0.016 0.110	0.016 0.110	0.016 0.110	0.016 0.110	0.016 0.110	0.016 0.110
Laboratory value at 10°C (50°F) mean test temperature	ASTM C-177 or ASTM C-518	W/m.K Btu.in/ft <sup>2</sup> .hr.°f	0.027 0.190	0.027 0.190	0.028 0.200	0.025 0.170	0.025 0.170	0.025 0.170
5 years aged (design) value at 24°C (75°F) mean test temperature		W/m.K Btu.in/ft <sup>2</sup> .hr.°f	0.032 0.220	0.032 0.220	0.032 0.220	0.032 0.210	0.030 0.210	0.030 0.210
Compressive strength <sup>4</sup> at 10% Deflection	DIN 53421 ASTM D-1621	kPa psi	300 43	210 30	150 22	400 57	450 65	700 100
Compressive Elastic Modulus		psi	1800	1400	1300	2200	2600	----
Water vapour permeability	ASTM C-355	perm .cm perm .in	0.79 0.47	0.84 0.50	0.94 0.56	0.67 0.40	0.67 0.40	0.67 0.40
Water absorption by submersion <sup>5</sup>	DIN 53428 ASTM D-2842 (±1% by Vol. precision)	DIN 53428 ASTM D-2842 (±1% by Vol. precision)	% by Vol. % by Vol.	0.20 <1.00	0.20 <1.00	0.20 <1.00	0.20 <1.00	0.20 <1.00
Capillarity	-	-	None	None	None	None	None	None
Linear coefficient of Thermal expansion & contraction (heat soaking conditions)	-	°C <sup>-1</sup> °F <sup>-1</sup>	43x10 <sup>-6</sup> 24x10 <sup>-6</sup>	49x10 <sup>-6</sup> 27x10 <sup>-6</sup>	49x10 <sup>-6</sup> 27x10 <sup>-6</sup>	43x10 <sup>-6</sup> 24x10 <sup>-6</sup>	43x10 <sup>-6</sup> 24x10 <sup>-6</sup>	43x10 <sup>-6</sup> 24x10 <sup>-6</sup>
Irreversible dimensional variation (temperature changes up to 65°C(158°F) After 24 hours exposure After 168 hours exposure	ASTM D-2126 Method G	% %	0.1 0.3	0.5 0.7	0.5 0.7	0.1 0.3	0.1 0.3	0.1 0.3
Flexural strength (at yield) Machine (length) direction cross (width) direction		ASTM C-203	kg/cm <sup>2</sup> psi kg/cm <sup>2</sup> psi	8.4 120 5.2 75	7.0 100 4.4 62	4.4 62 3.0 42	8.8 125 5.5 78	9.9 140 6.0 85
Fire classification	DIN 4102	Building Material Class	B1	B1	B1	B1	B1	B1

# BITUMEN IMPREGNATED WOOD FIBER FILLERS & PROTECTION BOARDS

BITUBOARD

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## PRODUCT DESCRIPTION

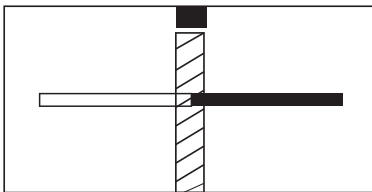
UNITECH Filler Boards is manufactured from highly resilient softwood fibers coated with bitumen. Filler Boards are dry and clean, and cannot extrude any form of staining matter. They are resistant to moisture penetration and ice formation in the joint. They are immune to dry and wet rot, fungus and most forms of insect attack or similar forms of deterioration.

They completely fills joints under repeated cycles of expansion and contraction with minimum extrusion. They are also a good insulating vapor barrier which is easily handled without breakage.

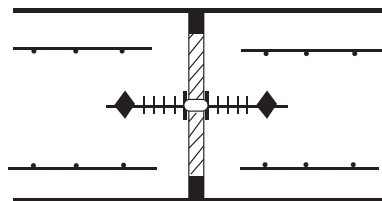


## BASIC USE

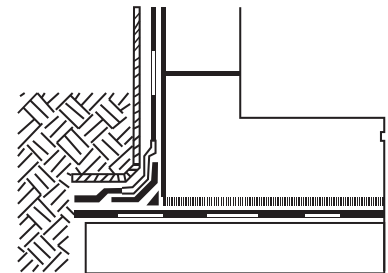
UNITECH Filler Boards are designed as a standard, Low cost, pre-moulded joint filler for expansion joints in civil engineering and building construction works of all types. The main uses for Bituboard in the construction industry are: roads, bridges, runways, pedestrian areas, basements, retaining walls and site slabs.



Expansion Joint Concrete Slabs



Expansion Joint in Vertical Walls



Protection to Waterproofing Membranes

## PROTECTION WORK

UNITECH Filler Boards are recommended for the protection of different materials, particularly waterproofing below-grade where abrasive and sharp backfill material could puncture or otherwise damage the waterproofing.



# BITUMEN IMPREGNATED WOOD FIBER FILLERS & PROTECTION BOARDS

BITUBOARD

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## TECHNICAL SPECIFICATIONS

Specification	Unit of Measurement	Value for Nominal Thickness in mm			
		9.5 & 10	12 & 12.5	18 - 20	24 - 25
Density of dry board	kg/m <sup>3</sup> lb/ft <sup>3</sup>	296 18.5	28.1 17.5	252 15.7	262 16.3
2h volume water absorption	%	4.1	3.4	1.9	1.6
24h volume water absorption	%	20	18	8	7
Moisture content	%	5.4	5.2	5.7	5.3
Asphalt content	%	10	10	10	10
Linear variation with change in moisture content	%	0.13	0.11	0.11	0.10
Compression	mm in	0.21 0.008	0.48 0.019	0.38 0.015	0.47 0.018

\* 20% Bitumen content is also available

\* 35% Bitumen content is also available

## TYPICAL PERFORMANCE CHARACTERISTICS

Properties	Test Method
Extrusion under Compression	<1mm
Application Temperature	-25°C to 80°C
Weather Resistance	-40°C to 130°C under normal usage
Shelf Period	> 2 years
Storage Requirements	Store flat, preferably under cover
Flash Point	>200°C
Flammability	Will burn slowly, does not support spread of flames
Toxicity	Non toxic under normal conditions of use
Chemical Resistance	Dilute acids -Excellent Dilute alkalis -Excellent Aliphatic hydrocarbons -Fair Aromatic hydrocarbons -Fair Chlorinated solvents -Fair Salt solutions -Excellent Detergent solutions -Excellent Water -Excellent
Shrinkage Factor	<0.5%
Specification Compliance	ASTM D IS175-83 & BS 1142:1989 AASHTO M 213 Corps of Engineers CRD-C 508 Federal Specification HH-F-341 F, type I

# POLYETHYLENE ROLLS

**POLIANE®**

POLIANE POLYETHYLENE ROLLS.

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## PRODUCT DESCRIPTION

Poliane is a polyethylene vapour barrier to alkalis, salts, acids and chemicals found in sub-soils. Fully stable and waterproof.

## DIMENSIONS

Supplied in rolls of different lengths, widths and thicknesses.

Film Thickness: From 100 gauges (25 Microns) to 1200 gauges (300 Microns).

Film Length: up to 25 meters.

Film Width: up to 4 meters

## BASIC USE

Used as a vapour barrier and damp proof membrane in concrete slabs, floors, insulation boards shuttering, etc... For corrosion protection of water and oil pipelines. Protects from the sun, wind, rain, dust and damage.

## COMPOSITION & MATERIALS

Poliane is an anti-corrosive and weather resistant polyethylene vapour barrier.





# POLYETHYLENE ROLLS



.....  
**POLIANE POLYETHYLENE ROLLS.**  
 .....

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## APPLICATION

Sleeves for corrosion protection of water and oil pipelines. Agricultural film for greenhouses, plastic tunnels & other agro-techniques.  
 Construction film used as a vapor barrier and damp proof membrane in concrete slabs, floors, over insulation boards, shuttering etc.

## DURABILITY

It retains its physical properties and remains chemically resistant to aggressive soil organism, plant and other soil fauna as well as domestic sewage and retains its flexibility in temperatures over 80oC.

## TECHNICAL SPECIFICATIONS

**TABLE 1- POLYETHYLENE FILM THICKNESS**

Millimeter	Gauge	Micron (μ)	Mill
0.05	200	50	2
0.08	320	80	3.2
0.10	400	100	4
0.15	600	150	6
0.20	800	200	8
0.25	1000	250	10
0.30	1200	300	12

1 guage= 1/100 mill = 1/100,000 inch=25.4/100,000mm = 0.254 micron

**TABLE 2 - TYPICAL PERFORMANCE CHARACTERISTICS**

Properties	Unit	Value	Test Method (ASTM)
Density at 24°C (unpigmented)	g/cc	0.923	D-1505
Dart impact	g	100	D-1709
Tear resistance	kg/cm <sup>2</sup>	80	D-1004
Tensile strength (Longitudinal direction) Transverse direction)	kg/cm <sup>2</sup> kg/cm <sup>2</sup>	180 170	D-882 D-882
Elongation (Longitudinal direction) Transverse direction)	% %	230 375	D-882 D-882
Transparency	%	20	D-1746
Gloss	45	40	D-2457
Haze	%	9.0	D-1003
Heat seal range	°C	115-175	-
Moisture Loss	g/cm <sup>2</sup>	0.055	C-156



# POLYPROPYLENE PROTECTION BOARDS



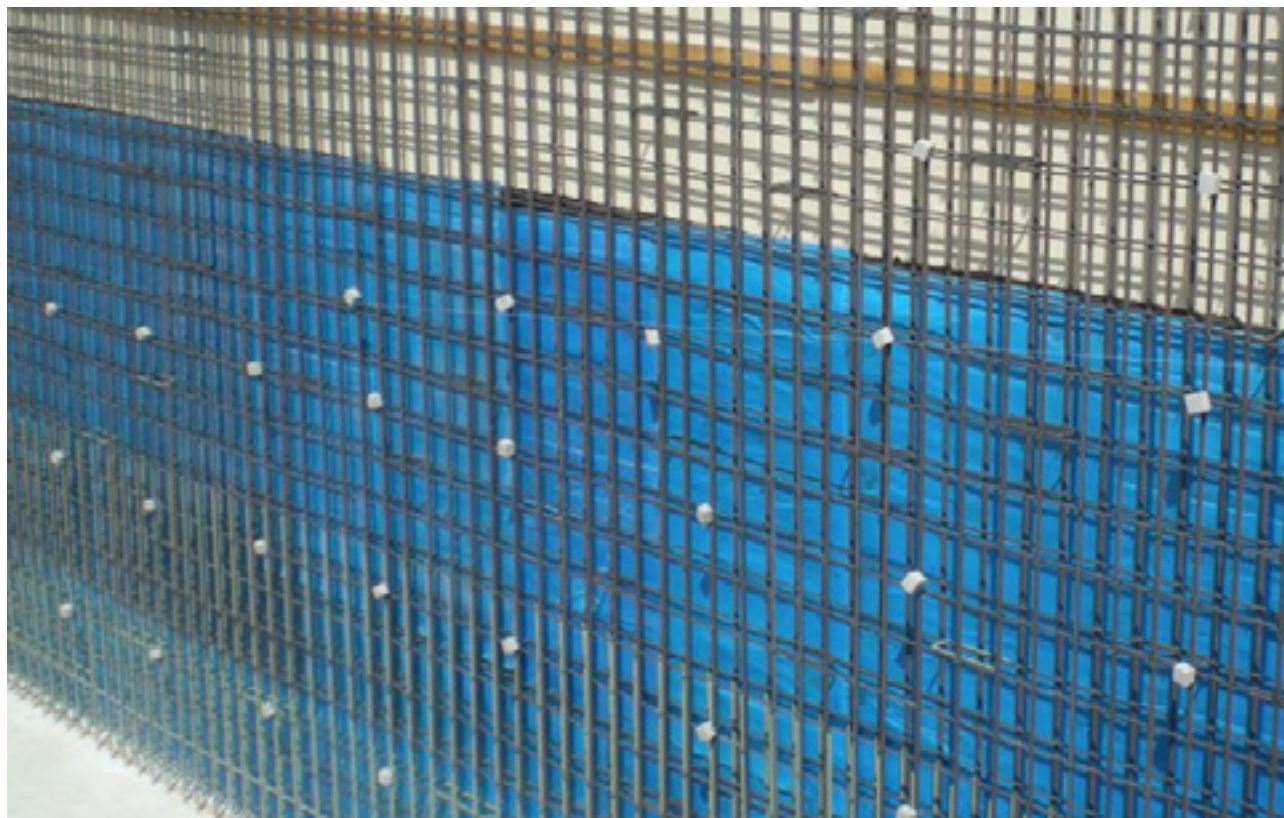
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## POLY BOARD

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[www.unipro-ikk.com](http://www.unipro-ikk.com)

Poly Board is a semi-flexible polypropylene based board for waterproofing membrane protection.



## DESCRIPTION

**POLY BOARD** is extremely strong in puncture and injury resistance. It is engineered to resist puncture at over 1100, 1300, 1500, 2000, 24000 and 2600 Newton as per ASTM E-154.

**POLY BOARD** differs from any other materials used to protect the waterproofing membrane as it enjoys flexibility which enables its use for tacking corners, protrusions, rounded surfaces and also uneven surfaces.

**POLY BOARD** is not affected by mineral oils, solvents, acids, bases, and salts. These elements are usually found in contaminated water tables and soil compositions. This product does not absorb water, which adds to the impermeability of the waterproofing membrane.

# POLYPROPYLENE PROTECTION BOARDS



POLY BOARD

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## APPLICATION

Poly Board is applied on hot asphalt liquid membranes, torched applied asphalt membranes and on rubber based waterproofing membranes.

1. Hot applied liquid membrane: Poly Board is simply laid down on top of hot asphalt before it cools down.
2. Torched applied asphalt membrane: before application of Poly Board, the exposed side of the membrane shall be lightly torched in separate spots. When the top exposed layer of the membrane changes into a sticky shiny layer, Poly Board protection boards are applied with gentle pressure.
3. Rubber waterproofing membrane: a solvent based glue (Patex or similar) is applied as an adhering agent between the waterproofing membrane and the protection board.
4. Poly Board is also used as a protection boards for tiles of various finishes during construction phases.

## TECHNICAL SPECIFICATIONS

Technical Data	
Material	Polypropylene
Size	1m x 2m
Thickness	3, 4, 5, 6mm
Approximate Weight	450 - 700 gr./sqm
Tear Resistance (ASTM 1004)	10 - 18 kg
Water Absorption (ASTM 1004)	nil
Resistance to 60% NaOH (ASTM D 543)	not Affected
Resistance to 30% NaOH (ASTM D 543)	not Affected
Resistance to 30% N <sub>2</sub> So <sub>4</sub> (ASTM D 543)	not Affected
Resistance to 10% NCL (ASTM D 543)	not Affected
Resistance to Mineral Oils (ASTM)	not Affected
Linear Dimensioning Change due to Accelerated Aging (ASTM D 1204)	nil
Resistance to Puncture (ASTM E 154-88 section 10)	1000 - 1800 Newton



## .3. WATERPROOFING SOLUTIONS

- 1- FLUID-APPLIED WATERPROOFING MEMBRANES
- 2- ONE COMPONENT ALIPHATIC POLYURETHANE COATINGS
- 3- TWO-COMPONENT, CEMENTITIOUS MORTAR FOR WATERPROOFINGS
- 4- BITUMEN MODIFIED MOISTURE CURING POLYURETHANE MEMBRANES

# FLUID-APPLIED WATERPROOFING MEMBRANES

## TREMPROOF 250GC

[www.unipro-ikk.com](http://www.unipro-ikk.com)

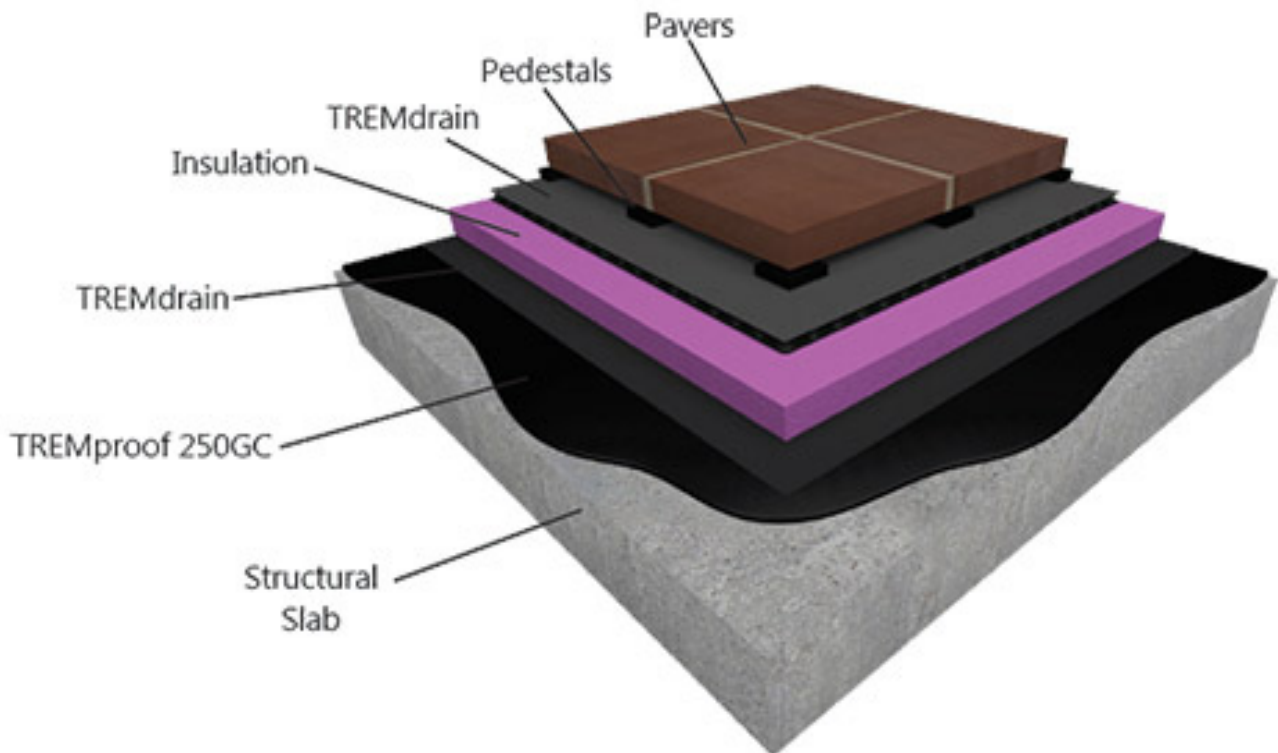
Single-Component, Rapid Curing, Fluid-Applied Elastomeric Waterproofing Membrane

### DESCRIPTION

TREMPROOF® 250GC is a rapid-curing, high-solids, VOC compliant modified polyurethane waterproofing membrane. It can be applied to damp and green concrete. TREMPROOF 250GC is a one-part moisture-curing elastomer available in three viscosities: Self-Leveling (SL), Roller (R) and Trowel (trowel intended for detailing work only).

### BASIC USES

TREMPROOF 250GC is designed for use on backfilled walls, split slab applications, planters and submerged conditions. TREMPROOF 250GC is a complementary waterproofing membrane that can be used with Tremco's Vegetated Roofing systems. Concrete masonry units and plywood are both acceptable substrates.



# FLUID-APPLIED WATERPROOFING MEMBRANES

TREMproof 250GC

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## FEATURES AND BENEFITS

- TREMproof 250GC can be applied in as little as 24 hours following the removal of concrete forms. It can also be applied to damp concrete, reducing the delays associated with rain or other sources of moisture.
- The unique ability to catalyze TREMproof 250GC-SL with water when desired will speed cure times, especially in cold temperatures and low relative humidity, to further condense the construction schedule.
- TREMproof 250GC can be applied at a rate of up to 120 mils in a single lift to speed application without sacrificing performance.\
- It can also be applied in multiple lifts to achieve a 215-mil high-build system when maximum protection is required

## APPLICABLE STANDARDS

TREMproof 250GC meets or exceeds the following specifications:

- ASTM C836 Standard Specifications for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course
- City of Los Angeles (COLA) approval standards
- Miami-Dade County Acceptance Limitations
- Do not apply to contaminated surfaces.
- Not to be used as an exposed or wearing surface.
- Use with adequate ventilation.
- Concrete forms must be removed a minimum of 24 hours before TREMproof 250GC can be applied.
- Not approved for direct contact with asphalt-based products.
- Not for use with potable water.
- Contact your local Tremco Sales Representative or Tremco Technical Service for compatibility information and job-specific recommendations on tie-in and termination details.
- Do not apply over a curing or forming oil compound.
- Do not apply over a non-vented metal pan decking substrate without contacting your local Tremco Sales Representative.
- Backfilled applications require the use of a compatible Tremco protection course

## LIMITATIONS

- Do not apply to contaminated surfaces.
- Not to be used as an exposed or wearing surface.
- Use with adequate ventilation.
- Concrete forms must be removed a minimum of 24 hours before TREMproof 250GC can be applied.
- Not approved for direct contact with asphalt-based products.
- Not for use with potable water.
- Contact your local Tremco Sales Representative or Tremco Technical Service for compatibility information and job-specific recommendations on tie-in and termination details.
- Do not apply over a curing or forming oil compound.
- Do not apply over a non-vented metal pan decking substrate without contacting your local Tremco Sales Representative.
- Backfilled applications require the use of a compatible Tremco protection course.

# FLUID-APPLIED WATERPROOFING MEMBRANES

TREMPROOF 250GC

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## COVERAGE RATES

- Approximately 25 ft<sup>2</sup>/gal (0.61 M<sup>2</sup>/L) at 60 wet mils
- Approximately 18 ft<sup>2</sup>/gal (0.44 M<sup>2</sup>/L) at 90 wet mils
- Approximately 13 ft<sup>2</sup>/gal (0.32 M<sup>2</sup>/L) at 120 wet mils
- Approximately 7.5 ft<sup>2</sup>/gal (0.19 M<sup>2</sup>/L) at 215 wet mils

## PACKAGING

- 5-gallon (19-L) pails, 36 pails/pallet
- 55-gallon (208-L) drums, 4 drums/pallet

## TYPICAL PHYSICAL PROPERTIES

PROPERTY	DESCRIPTION	
Composition	Modified Polyurethane Waterproofing	
Color	Black	
Solids	No less than %84*	
Grade(s)	Trowel, Roller and Self-Leveling	
Cure Time	6 to 12 hr at 75 °F (24 °C), %50 RH	
Thickness	60 mils	
PROPERTY	TEST METHOD	TYPICAL VALUES
Film Thickness	ASTM C836	60 wet mils
Tensile Strength	ASTM D412	200 psi
Elongation	ASTM D412	%600
Adhesion-in-Peel after Water Immersion (Unprimed)	ASTM C836; ASTM C 794	17 lbf/in (29.77 N/cm)
Low-Temp Flexibility	ASTM C836; ASTM C 836	Pass
Weight Loss %20 maximum Loss %80 Solids minimum	ASTM C836; ASTM C 1250	%15 Loss maximum %85 Solids minimum
Low Temperature Crack Bridging	ASTM C836; ASTM C1305	Pass
Extension after heat aging No observable cracking	ASTM C836; ASTM C1522	Pass
Hardness, Type 00 50 Min.	ASTM C836; ASTM D 2240	87
Water Vapor Permeance	ASTM C836; ASTM E96 Wet Cup	1.15 US Perms
	ASTM C836; ASTM E96 Inverted Wet Cup	1.05 US Perms
Maximum V.O.C.	Method 310	No more than 177 g/L* (LV formulation does not exceed 100 g/L)
Shelf Life Stability 6 Months Minimum	6 months	12 months
Application Temperature		Above 40 °F (5 °C) and rising. If installing below 40 °F (5 °C), please contact Tremco Technical Services at 866-209-2404.
Storage Temperature		40 to 100 °F (5 to 37 °C)

\*Varies Depending on grade of material used.

\*\*Modified ASTM C1305



# ONE COMPONENT ALIPHATIC POLYURETHANE COATINGS

POLY TI/PU810

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## PACKING AND TRANSPORTATION

**Packing:** 20kg/ metal bucket, 230kg/drum  
**Transportation:** protect the products from stamp,rain,high temperature and heat souce;carefully and slightly move and forbid the products to squeeze and crash

## SAFETY OPERATION DATA

MSDS isn't included here. Please read TDS, MSDS and label carefully before application. You can get MSDS from SEPNA or other distributors, mail to service center unipro.marketing@ikkgroup.com or call customer service +971 4 818 1941

## ATTENTION OF OPERATION

1. The sealant should be guaranteed in the warranty period before application.
2. This product is non-toxic after curing completely, but before curing, please keep it away from eyes and skin. If touch it with eyes and skin, wash immediately and thoroughly with soap and water. If feel uncomfortable, please got to hospital timely.

## WARRANTY AND LIABILITY

All product properties and application details based on information are ensured to be reliable and accurate. But you still need to test its property and safety before application. The advices we supply don't apply in any circumstances. UNIPRO don't make assurance of any other applications outside the specification until UNIPRO supply a special written guarantee. UNIPRO is only responsible to replace or refund if this product is defective within the warranty period stated above. UNIPRO makes it clear that will not take responsible for any accidents.



# ONE COMPONENT ALIPHATIC POLYURETHANE COATINGS

POLY TI/PU820

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## DOSAGE AND SPECIFICATION

Dosage: The density of polyurethane sealant is  $1.30 \pm 0.1 \text{g/cm}^3$ , Suggested PU sealant dosage is between 0.125kg and 0.145kg when the joint size is width 1cm, depth 1cm and length 1cm.  
- Specification: 600ml/sausage.1kg/ metal bucket, 5kg/ metal bucket, 20kg/ metal bucket, 230kg/drum;packing can be customized; Shelf life 6 month

## SAFETY OPERATION DATA

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# TWO-COMPONENT, CEMENTITIOUS MORTAR FOR WATERPROOFINGS

MAPELASTIC SMART

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## TECHNICAL CHARACTERISTICS

Mapelastic is a two-component mortar based on cementitious binders, fine-grained selected aggregates, special additives and synthetic polymers dispersed in water. blended according to a formula developed in MAPEI's own research laboratories. When the two components are mixed together, a freeflowing mix is obtained which may be easily applied, even on vertical surfaces, at a thickness of up to 2 mm in one single coat.

Thanks to the high content and quality of the synthetic resins, the cured layer of Mapelastic remains constantly flexible under all environmental conditions and, furthermore, is completely waterproof up to a pressure of 1.5 bar and resistant to the chemical attack of de icing salts, sulphates, chlorides and carbon dioxide.



Mapelastic has excellent bonding properties to all concrete, masonry, ceramic and marble surfaces, as long as they are sound and sufficiently clean.

This property, together with its resistance to the deteriorating effect of UV rays, a characteristic of this product, ensures that structures protected and waterproofed with Mapelastic have a long service life, even if they are located in areas with particularly rigid climatic conditions, in coastal areas with a saline-rich atmosphere or in industrial areas where the air is particularly polluted.

**Mapelastic** meets the requirements defined by EN 1504-9 ("Products and systems for the protection and repair of concrete structures — Definitions, requirements, quality control' and evaluation of conformity - General principles for the use of products and systems") and the minimum requirements claimed by EN 1504-2 coating (C) according to the PI, MC and IR principles ("Protection systems for concrete surfaces").

## WHERE TO USE

- Waterproofing and protection of concrete structures, renders and cementitious screeds.

## SOME APPLICATION EXAMPLES

- Waterproofing of concrete basins used for containing water.
- Waterproofing bathrooms, showers, balconies, terraces, swimming pools, etc. before laying ceramic tile finishes.
- Waterproofing of plasterboard, render or cementitious surfaces. lightweight cement blocks and marine-grade plywood.
- Flexible smoothing layer for light-sectioned concrete structures, including those subjected to minor deformation when under load (e.g. pre-cast panels).
- Protection of renders or concrete with cracks caused by shrinkage, against the infiltration of water and aggressive atmospheric elements.

# TWO-COMPONENT, CEMENTITIOUS MORTAR FOR WATERPROOFINGS

MAPELASTIC SMART

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## SOME APPLICATION EXAMPLES

- Protection, against the penetration of carbon dioxide, of concrete pillars and joists and road and railway viaducts repaired with products from the Mapegrout range, and structures with an insufficient layer of concrete covering on the reinforcement rods.
- Protection of concrete surfaces which may come into contact with seawater, de-icing salts, such as sodium or calcium chloride, and sulphates.

## RECOMMENDATIONS

- Do not use **Mapelastic** for thick coatings (more than 2 mm per coat).
- Do not apply **Mapelastic** at temperatures below +8°C.
- Do not add cement, aggregates or water to **Mapelastic**.
- Protect from rain and water spillage for the first 24 hours after application.
- When Mapelastic is used on large terraces or flat roofs that will not be covered with tiles, vapour vents shall be appropriately positioned according to the level of humidity in the substrate (generally every 20-25 m<sup>2</sup>).

This operation is indispensable when **Mapelastic** is laid on substrates which are particularly absorbent, such as screeds which have been lightened with polystyrene or foamed clay.

## CLEANING

Due to the high bonding strength of **Mapelastic**, even on metals, it is recommended to wash work tools with water before the mortar sets. Once it has set, cleaning may only be carried out by mechanical means.

## CONSUMPTION

Manual application:  
approx. 1.7 kg/m<sup>2</sup> per mm of thickness.

Spray gun application:  
approx. 2.2 kg/m<sup>2</sup> per mm of thickness.

## PACKAGING

Units of 32 kg:  
component A: 24 kg bags;  
component B: 8 kg drums.  
Upon request, component B may also be supplied in 1000 kg tanks.  
Units of 16 kg:  
26 kg bags and 14 kg drum.

# TWO-COMPONENT, CEMENTITIOUS MORTAR FOR WATERPROOFINGS

MAPELASTIC SMART

[www.unipro-ikk.com](http://www.unipro-ikk.com)

Mapelastic: two-component flexible cementitious membrane for waterproofing balconies, terraces, bathrooms and swimming-pools, and for protecting concrete in compliance with the requirements of EN 14891 and EN 1504-2 coating (C) principles PI, MC and IR.

TECHNICAL DATA (typical values)

## PRODUCT IDENTITY

	comp.A	COMP.B
Consistency:	powder	liquid
Color	grey	white
Bulk density (g/cm <sup>3</sup> )	1.4	-
Density (g/cm <sup>3</sup> )	-	1.1
Dry solids content (%)	100	50
Storage:	12 months in its original packaging in a dry place	24 months in its original packaging in a dry place
Hazard classification according to Directive 1999/45 CE.	irritant	none
	Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and safety Data Sheet.	
Customs class	3824 50 90	

## APPLICATION DATA OF PRODUCT (at +20°C - 50% R.H.)

Color of mix	Grey
Mixing ratio	component A: component B=3:1
Consistency of mix	plastic, trowellable
Density of mix (kg/m <sup>3</sup> )	1,700
Density after application by spray (kg/m <sup>3</sup> )	2,200
Application temperature range	from +5°C to +35°C
Pot life of mix	1 hour

# TWO-COMPONENT, CEMENTITIOUS MORTAR FOR WATERPROOFINGS

MAPELASTIC SMART

[www.unipro-ikk.com](http://www.unipro-ikk.com)

FINAL PERFORMANCES (thickness 2.0 mm)			
	Acceptable limit according to EN 1504-2 coating (C) (PI, MC and IR principles)	Performance figures for Mapelastic	
<b>Bond strength to concrete according to EN 1542:</b> - after 28 days at +20°C AND 50% r.h. (N/mm <sup>2</sup> )	For Flexible Systems	1.0	
<b>Thermal compatibility to freeze/thraw cycles with de-icing salts, measured as bond strength according to EN 1542 (N/mm<sup>2</sup>)</b>	With No Traffic: > 0.8 With Traffic: >1.5	0.8	
<b>Bond strength to concrete according to EN 1542:</b> - after 7 days at +20°C and 50% R.H. +21 days in water (N/mm <sup>2</sup> )	Not Applicable	0.6	
<b>Flexibility according to DIN 53504 mod, expressed as elongation:</b> - after 28 days at +20°C and 50% R.H. (%)	Not Applicable	30	
<b>Static crack-bridging at -20°C according to EN 1062-7 expressed as maximum width of the crack (mm):</b>	From Class A1 90.1 Mm To Class A5 (2.5Mm)	Class A3 (+20°C) (>0.5 Mm)	
<b>Dynamic crack-bridging at -20°C according to EN 1062-7 expressed as maximum width of the crack (mm):</b>	From Class B1 To Class B4.2	Class B3.1 (-20°C) No Failure Of The Test Piece After 1,000 Crack Cycles With Movement Of Crack Of Crack From 0.10 To 0.30 Mm	
<b>Permeability to water vapour according to EN ISO 7783-1:</b> - equivalent thickness of air S <sub>D</sub> (m):	Class I:sd < 5 M (Permeable To Vapour)	S <sub>D</sub> 3.6	1.800
<b>Impermeability to water, expressed as capillary absorption according to EN 1062-3 (kg/m<sup>2</sup>-h<sup>0.5</sup>):</b>	< 0.1	< 0.05	
<b>Permeability to carbon dioxide (CO<sub>2</sub>) according to EN 1062-6</b> - diffusion in an equivalent thickness of air S <sub>Dco</sub> (m):	> 50	> 50	
<b>Reaction to fire (Euroclass)</b>	According To Class Declared By Manufacturer	C, S1 - D0	
	Acceptable Limit According To En 14891	Performance Figures For Mapelastic	
<b>Impremeability to water under pressure according to EN 14891-A.7 (1.5 bar for 7 days of positive lift);</b>	Not Applicable	Not Applicable	
<b>Crack-bridging ability at +20°C according to EN 14891-A.8.2 (mm):</b>	> 0.75	0.9	
<b>Crack-bridging ability at +20°C according to EN 14891-A.8.3 (mm):</b>	> 0.75	0.8	
<b>Initial bond strength according to EN 14891-A.6.2 (N/mm<sup>2</sup>)</b>	> 0.5	0.8	
<b>Bond strength after immersion in water according to EN 14891-A.6.3 (N/mm<sup>2</sup>):</b>	> 0.5	0.55	
<b>Bond strength after application of heat source according to EN 14891-A.6.5 (N/mm<sup>2</sup>):</b>	> 0.5	1.2	
<b>Bond strength after freeze-thraw cycles according to EN 14891-A.6.5 (N/mm<sup>2</sup>):</b>	> 0.5	0.6	
<b>Bond Strength after immersion in basic water according to EN 14891-A.6.9 (N/mm<sup>2</sup>):</b>	> 0.5	0.6	

# BITUMEN MODIFIED MOISTURE CURING POLYURETHANE MEMBRANES

TREMPROOF 60

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## DESCRIPTION

TREMProof® 60 is a single component, bitumen modified, moisture curing polyurethane fluid applied waterproofing membrane.

It is used in the waterproofing of Roofs, Tunnels, Terraces, Balconies, Plaza Decks, Planter Boxes, Retaining Walls, Fountains and Pools.



## CHARACTERISTICS

SPECIFIC GRAVITY Approx. 1.05

SOLIDS >80%

## PERFORMANCE (TYPICAL PROPERTIES)

- ULTIMATE ELONGATION ASTM D412-80 >900%
- ULTIMATE TENSILE STRENGTH ASTM D412-80 >1.6MPa (232psi)
- RECOVERY FROM 350% ELONGATION ASTM D412-80 95%
- ADHESION STRENGTH ASTM C836-81 (To primed concrete, after 7 days immersion) 2.67 kgfcm (15pli)
- WATER ABSORPTION, WEIGHT GAINED AFTER 6 MONTHS IMMERSION ASTM D471-77 2-4%
- HARDNESS ASTM D2240-80 25 Shore A
- HIGH TEMPERATURE AGEING ASTM D412-80 (14 days @82oC)
  - o Elongation = 850% minimum
  - o Hardness = Shore A 25 maximum
- SERVICE TEMPERATURE ASTM D412-80 -40OC TO +65OC (continuous ambient)

## USAGE

### SURFACE PREPARATION

- Concrete surfaces shall be cured for a minimum of 28 days.
- Surface should have light steel trowel finish followed by a fine hair broom or equivalent finish.
- Substrate should be free from dust, oil, curing agent residues and other contaminants.
- All shrinkage and non moving structural cracks under 1.5mm shall be filled with not less than 1.5mm (1500 wet microns) of TREMProof® 60R extending 75mm to both sides of the crack.
- Cracks wider than 1.5mm should be routed to 6mm width and 13mm depth. Install a closed cell polyethylene backing rod and seal with TREMProof® 60R extended to 75mm either side of the joint
- Wherever a vertical penetration exists (eg parapet walls, columns, stacks etc.) install a 25mm fillet of TREMProof® 60R at the point where the vertical and horizontal surfaces intersect. The TREMProof® 60 membrane should then be applied over the fillet to a height of approximately 75mm to form an over flashing.
- Voids and honeycomb must be patched with a non-shrinking, quick setting grout. Allow the patched area a minimum of 7 days to cure.

### PRIMING

- To reduce blisters caused by air entrapment on rough and porous concrete, use TREMProof® 60H thinned 20% with Xylol as a primer.
- PVC plumbing shall be primed with TREMCO Primer No. 6 and shall receive a preparatory coating of TREMProof® 60.
- All metal surfaces to receive TREMProof® 60 shall be primed with TREMCO Primer No. 6.
- TREMProof® 60 preparatory work shall be cleaned with Xylol. To join fresh applications of TREMProof® 60 to those that are more than 48 hours old, apply TREMCO Primer No. 17 at the interface. Recommended overlap is 150mm.

# BITUMEN MODIFIED MOISTURE CURING POLYURETHANE MEMBRANES

.....  
**TREMPROOF 60**  
.....

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## USAGE

### METHOD OF A PPLICATION

- Install TREMProof® 60R by trowel and TREMProof® 60H by squeegee, directly to the clean substrate.
- Apply at a minimum thickness of 1.5mm (1500 wet microns) This 1.5mm is in addition to the preparatory work.
- A slip sheet of heavy duty builders plastic must be installed between the membrane and any solid topping.

### STORAGE

Store in original unopened packaging in dry conditions between +5OC and +25OC.

### SHELF LIFE

12 months when stored as recommended in original unopened packaging.

## .4. MEP NON METALLIC SOLUTIONS

- 1- UPVC ELECTRICAL CONDUITS AND TRUNKINGS
- 2- CABLE TIES & NYLON PLUGS
- 3- HOTSHRINK TUBINGS

# UPVC ELECTRICAL CONDUITS AND TRUNKINGS



DECODUCT

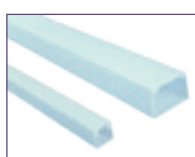
[www.interplast.ae](http://www.interplast.ae)

## DESCRIPTION

### Basic Use:

DECODUCT is a super high impact uPVC conduit, manufactured from specially formulated PVC, to meet the stringent requirements of: BS 4607, EN 61386, Saudi Arabian Standards SS A254/255, Gulf Standards GS32/33 and relevant I.E.E. regulations. DECODUCT UPVC conduits are well-known in electrical cable/wire installations and specified in most jobs such as both, new construction and maintenance contracts.

## A- TRUNKING

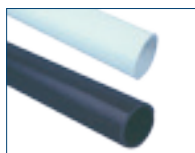


MINI Trunking			
Item code	Size (mm)	Standard Packs	
		Pcs.	Mtrs
DD-1100-C-TRDMT1	16 x 16	30	87.0
DD-1105-C-TRDMT2	25 x 16	20	58.0
DD-1110-C-TRDMT3	38 x 16	20	58.0
DD-1115-C-TRDMT4	38 x 25	15	43.5
DD-1117-C-TRDMT5	38 x 38	8	23.2

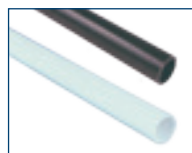


MAXI Trunking			
Item code	Size (mm)	Standard Packs	
		Pcs.	Mtrs
DD-1120-C-TRDXT1	50 x 50	8	23.2
DD-1125-C-TRDXT2	75 x 50	4	11.6
DD-1130-C-TRDXT3	75 x 75	4	11.6
DD-1135-C-TRDXT4	100 x 50	2	5.8
DD-1140-C-TRDXT5	100 x 100	2	5.8

## B- CONDUITS



Heavy Gauge Round Conduit			
Item code	Size (mm)	Standard Packs	
		Pcs.	Mtrs
DCV1	16 x 1.6	50	145
DCV2	20 x 1.8	20	58
DCV3	25 x 1.9	20	58
DCV4	32 x 2.5	10	29
DCV5	38 x 2.5	10	29
DCV6	50 x 3.2	10	29



Heavy Gauge Round Conduit			
Item code	Size (mm)	Standard Packs	
		Pcs.	Mtrs
DCH1	16 x 1.4	50	145
DCH2	20 x 1.55	20	58
DCH3	25 x 1.8	20	58
DCH4	32 x 2.1	10	29
DCH5	38 x 2.2	10	29
DCH6	50 x 2.5	10	29



Light Gauge Round Conduit			
Item code	Size (mm)	Standard Packs	
		Pcs.	Mtrs
DCL1	16 x 1.1	50	145
DCL2	20 x 1.2	20	58
DCL3	25 x 1.4	20	58
DCL4	32 x 1.5	10	29
DCL5	38 x 1.5	10	29
DCL6	50 x 1.9	10	29



Pliable Conduit - Corrugated			
Item code	Size (mm)	Standard Packs	
		Mtrs/Roll	
<b>HEAVY GAUGE</b>			
DPH2	20	50	
DPH3	25	50	
<b>LIGHT GAUGE</b>			
DPL2	20	50	
DPL3	25	50	



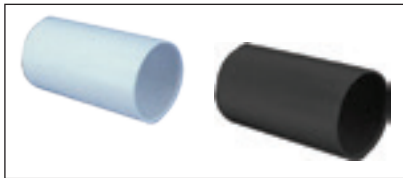
# UPVC ELECTRICAL CONDUITS AND TRUNKINGS



DECODUCT

[www.interplast.ae](http://www.interplast.ae)

## C- FITTINGS



Straight Couplers		
Item code	Size (mm)	Standard Packs
DNC2	20	100
DNC3	25	50
DNC4	32	50
DNC5	38	25
DNC6	50	20



Normal Bends-Slip type		
Item code	Size (mm)	Standard Packs
DLB2	20	20
DLB3	25	10
DLB4	32	5
DLB5	38	2
DLB6	50	2



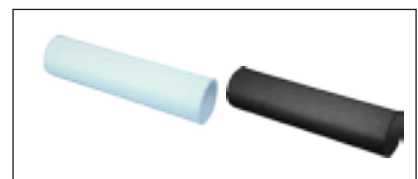
Male Threaded Bush		
Item code	Size (mm)	Standard Packs
DMB2	20	200
DMB3	25	100
DMB4	32	100
DMB5	38	50
DMB6	50	25



Female Adaptors		
Item code	Size (mm)	Standard Packs
DFA2	20	100
DFA3	25	50
DFA4	32	25
DFA5	38	20
DFA6	50	20



Loop in Boxes		
Item code	Size (mm)	Standard Packs
DLI2	20 K.O.(4)	25
DLI3	25 K.O.(2)	25



Expansion Couplers		
Item code	Size (mm)	Standard Packs
DEC2	20	50
DEC3	25	25
DEC4	32	10
DEC5	38	10
DEC6	50	10



Normal Bends-Heavy Gauge		
Item code	Size (mm)	Standard Packs
DHB2	20	20
DHB3	25	10
DHB4	32	5
DHB5	38	2
DHB6	50	2



Male Adaptors		
Item code	Size (mm)	Standard Packs
DMA2	20	100
DMA3	25	50



Reducers		
Item code	Size (mm)	Standard Packs
DRD2	25/20	100

# UPVC ELECTRICAL CONDUITS AND TRUNKINGS



DECODUCT

[www.interplast.ae](http://www.interplast.ae)



Loop in Boxes

Item code	Size (mm)	Standard Packs
DJT2	20	20
DJT3	25	20



Terminal - One Way

Item code	Size (mm)	Standard Packs
OJO2	20	20
OJO3	25	20



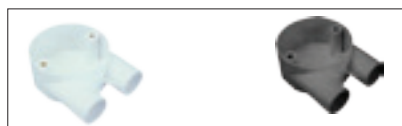
Loop in Boxes

Item code	Size (mm)	Standard Packs
DJA2	20	20
DJA3	25	10



Loop in Boxes

Item code	Size (mm)	Standard Packs
DJF2	20	10
DJF3	25	10



U - Two Way

Item code	Size (mm)	Standard Packs
DJU2	20	20
DJU3	25	20



Y - Three Way

Item code	Size (mm)	Standard Packs
DJY2	20	20
DJY3	25	10



H - Four Way

Item code	Size (mm)	Standard Packs
DJH2	20	10
DJH3	25	10



Circular Extension Rings

Item code	Size (mm)	Standard Packs
DER2	15	50
DER3	20	50



Tee - Three Way

Item code	Size (mm)	Standard Packs
DJE2	20	10
DJE3	25	10



Loop in Boxes

Item code	Size (mm)	Standard Packs
DNS	Plain	25

# UPVC ELECTRICAL CONDUITS AND TRUNKINGS



UNIDUCT®

www.unipro-ikk.com

## UNIDUCT® PRODUCT MARKINGS

UNIDUCT conduit pipes and fittings meet the requirements prescribed by the following standards organisations: SASO, BS, NEMA and ASTM. Our PVC pipe conduit range in straight runs of 2.9, 3, 6 meters are marked with standards specification requirements, logo, product name, standard, schedule/class, country of origin, manufacturer name, and a unique batch number that ensures traceability tracking and quality control.

## UNIDUCT® SPLIT DUCT

Segment degree (°)	Nominal Size inch
45°	2" - 6"
22 1/2°	2" - 6"
11 1/4°	2" - 6"

Two 45° Elbow may be segmented for 90°



## UNIDUCT® FITTINGS / CONDUIT ACCESSORIES

BS 4607 PART 3

### Standard Coupling

Code No.	Size	Std. Packs
	mm	pcs
SCPG020B	20	200
SCPG025B	25	110
SCPG032B	32	60
SCPG038B	38	45
SCPG050B	50	15



### Expansion Coupling

Code No.	Size	Std. Packs
	mm	pcs
ECPG020B	20	80
ECPG025B	25	40
ECPG032B	32	40
ECPG038B	38	25
ECPG050B	50	15



### Reducers

Code No.	Size	Std. Packs
	mm	pcs
RCPG25/20B	20X25	80



### Saddle & Base

Code No.	Size	Std. Packs
	mm	pcs
SDBA020B	20	200
SDBA025B	25	200
SDBA032B	32	130
SDBA038B	38	130
SDBA050B	50	50



### Female Adaptor

Code No.	Size	Std. Packs
	mm	pcs
FTAA020B	20	200
FTAA025B	25	120
FTAA032B	32	60
FTAA038B	38	40
FTAA050B	50	20



### Male Threaded Adaptor

Code No.	Size	Std. Packs
	mm	pcs
MTAA020B	20	250
MTAA025B	25	125
MTAA032B	32	100
MTAA038B	38	60

# UPVC ELECTRICAL CONDUITS AND TRUNKINGS



UNIDUCT®

[www.unipro-ikk.com](http://www.unipro-ikk.com)



1 Way Terminal Junction Box		
Code No.	Size	Std. Packs
	mm	pcs
1TJB020B	20	40
1TJB025B	25	35



2 Way Terminal Junction Box		
Code No.	Size	Std. Packs
	mm	pcs
2TJB020B	20	30
2TJB025B	25	25



3 Way Terminal Junction Box		
Code No.	Size	Std. Packs
	mm	pcs
3TJB020B	20	25
3TJB025B	25	20



4 Way Terminal Junction Box		
Code No.	Size	Std. Packs
	mm	pcs
4TJB020B	20	20
4TJB025B	25	18



Angle 2 Way Terminal Junction Box		
Code No.	Size	Std. Packs
	mm	pcs
ATJB020B	20	30
ATJB025B	25	30



2 Way U Type Terminal Junction Box		
Code No.	Size	Std. Packs
	mm	pcs
UTJB020B	20	30
UTJB025B	25	30



Y Type Terminal Junction Box		
Code No.	Size	Std. Packs
	mm	pcs
YTJB020B	20	25
YTJB025B	25	25



H Type Terminal Junction Box		
Code No.	Size	Std. Packs
	mm	pcs
HTJB020B	20	24
HTJB025B	25	24



Loop in Box		
Code No.	Size	Std. Packs
	mm	pcs
LPIN020B	20	40
LPIN025B	25	40



Terminal Lid		
Code No.	Size	Std. Packs
	mm	pcs
TRLD66B	66	225

# UPVC ELECTRICAL CONDUITS AND TRUNKINGS



UNIDUCT®

www.unipro-ikk.com

## UNIDUCT® FITTINGS / CONDUIT ACCESSORIES

AMERICAN STANDARD NEMA TC3



Male Adaptors		
Code No.	Size	Std. Packs
	mm	pcs
MTAA034G	3/4	120
MTAA001G	1	120

Pipe Base Spacer		
Code No.	Size	Std. Packs
	mm	pcs
BASP4X2B	4 x 2	100
BASP6X2B	6 x 2	100

Coupler		
Code No.	Size	Std. Packs
	mm	pcs
SCPG034G	3/4	100
SCPG001G	1	70



Pipe Inter Spacer		
Code No.	Size	Std. Packs
	mm	pcs
INSP4X2B	4 x 2	100
INSP6X2B	6 x 2	75

## WELD - ON PLASTIC PIPE CEMENT

This is solvent cement (adhesive) is specially designed for electrical and telecommunication duct installation manufactured by IPS Weld-On Adhesive, Inc., U.S.A.

### Distinct characteristics of the proposed 701 Weld-On Cement :

1. Clear, Medium bodied, Fast setting solvent.
2. Highly viscous - 500 cPs of a medium body.
3. Meets the requirement for Low VOC (Volatile Organic Compound)
4. Adheres to a standard for PVC material ASTM D1755
5. Can Brush Sizes were carefully chosen for the smallest pipe & fitting size

For Sizes & Code No. please see the table below :

Code No.	Sizes	Std. Packs
615KSCW701	QUART	12 PCS
615KSCW701/2	1 PINT	12 PCS
615KSCW701/4	1/2 PINT	48 PCS
615KSCW701/8	1/4 PINT	48 PCS



**CAUTION:** Inflammable Mixture. Do not use near fire or flame.

# CABLE TIES & NYLON PLUGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## CABLE TIES

The standard cable ties are produced exclusively in Polyamide 6.6 to avoid problems with separation of material (e.g., metals) during recycling or interference with electronic equipment. The black cable ties are added with carbon black that gives an UV resistance for outside applications.

### STANDARD CABLE TIES - POLYAMIDE 6.6 WIDTH 2,2 : 12,5

#### NATURAL COLOUR CABLE TIES

Code	Description	Pcs/Pack	Pcs/Carton
EL-1100-C-5201CTS	2,2x75	100	20.000
EL-1110-C-5203CTS	2,5x98	100	15.000
EL-1120-C-5205CTS	2,6x135	100	12.000
EL-1130-C-5206CTS	2,6x160	100	10.000
EL-1140-C-5207CTS	2,6x200	100	8.000
EL-1150-C-5209CTS	3,6x140	100	7.000
EL-1160-C-5214CTS	3,6x200	100	7.000
EL-1170-C-5210CTS	3,6x290	100	4.500
EL-1175-C-5208CTS	4,5x120	100	8.000
EL-1180-C-5212CTS	4,5x160	100	6.000
EL-1190-C-5211CTS	4,8x178	100	5.000
EL-1200-C-5213CTS	4,8x200	100	4.000
EL-1210-C-5215CTS	4,8x250	100	4.500
EL-1220-C-5216CTS	4,8x290	100	3.500
EL-1240-C-5217CTS	4,8x360	100	3.000
EL-1245-C-5219CTS	4,8x390	100	7.000
EL-1250-C-5218CTS	4,8x430	100	6.000
EL-1270-C-5220CTS	7,8x120	100	4.000
EL-1280-C-5221TS	7,8x180	100	2.500
EL-1290-C-5223TS	7,8x240	100	2.000
EL-1300-C-5225TS	7,8x300	100	1.500
EL-1310-C-5226TS	7,8x365	100	1.500
EL-1320-C-5227TS	7,8x450	100	3.000
EL-1330-C-5229TS	7,8x540	100	2.000
EL-1340-C-5231TS	7,8x750	100	2.000
EL-1350-C-5233TS	9,0x780	100	1.300
EL-1360-C-5234TS	12,5x225	50	2.000
EL-1380-C-5237TS	12,5x225	50	1.000
EL-1390-C-5239TS	12,5x720	50	1.000
EL-1400-C-5241TS	12,5x850	50	1.500
EL-1410-C-5243TS	12,5x1000	50	1.000





# CABLE TIES & NYLON PLUGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## NYLON PLUGS

### UNIVERSAL LIGHT - DUTY ANCHOR

T6 - Universal Nylon Plug Polyamide 6			
Packed in box			
Code	Description	Pcs/Pack	Pcs/Carton
EL-0091-C-565386	T6 6	100	3.200
EL-0093-C-565387	T6 8	100	1.600
EL-0095-C-565388	T6 10	50	800
EL-0097-C-565281	T6 12	25	400



#### T6/VA



#### T6/VX



E - STANDARD NYLON PLUG POLYAMIDE 6 WITHOUT LIP			
Packed in box			
Code	Description	Pcs/Pack	Pcs/Carton
EL-0007-C-8701215	E 6x30	100	9.000
EL-0009-C-8701217	E 8x40	100	4.000
EL-00010-C-8701218	E 10x50	50	2.000
EL-00011-C-8701219	E 10x60	50	2.000
EL-00012-C-8701220	E 12x60	25	1.000



#### EB

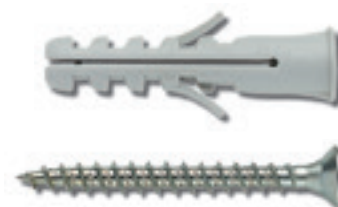
EB - STANDARD NYLON PLUG POLYAMIDE 6 WITH LIP			
Packed in box			
Code	Description	Pcs/Pack	Pcs/Carton
EL-0045-C-8701052	EB 5	200	19.200
EL-0050-C-8701053	EB 6	100	9.600
EL-0065-C-8701050	EB 7	100	9.600
EL-0060-C-8701054	EB 8	100	4.000
EL-0070-C-8701055	EB 10X50	50	2.000
EL-0080-C-8701056	EB 12	25	1.000



#### E/VA



#### EB/VA



# CABLE TIES & NYLON PLUGS



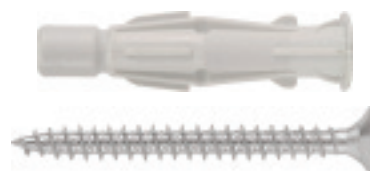
ELEMATIC

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## T4



## T4/VA



## TPF



## TPFC



## HAMMER - IN ANCHOR

UCX - HAMMER IN ANCHOR, NYLON (PA 6),  
CYLINDRICAL LIP - YELL. GALV. STEEL NAIL

packed in box

Code	Description	Pcs/Pack	Pcs/Carton
EL-0100-C-8710001	UCX 5x25V	100	3.200
EL-0110-C-8710002	UCX 5x36V	100	3.200
EL-0120-C-8710003	UCX 5x45V	100	3.200
EL-0140-C-8710005	UCX 6x45V	100	3.200
EL-0150-C-8710006	UCX 6x55V	100	2.400
EL-0160-C-8710007	UCX 6x70V	100	2.400
EL-0180-C-8710009	UCX 8x60V	50	1.600
EL-0190-C-8710010	UCX 8x75V	50	1.600
EL-0200-C-8710011	UCX 8x100V	50	1.200
EL-0210-C-8710012	UCX 8x120V	50	1.200
EL-0220-C-8710013	UCX 8x135V	50	1.200

## UCX TS



## UCX VM



## UCX TB V





# CABLE TIES & NYLON PLUGS



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## FRAME ANCHOR

APR/V - SPECIAL COUNTERSUNK FLAT HEAD SCREW PZ,YELLOW GALVAN.STEEL 5.8			
packed in box			
Code	Description	Pcs/Pack	Pcs/Carton
EL-0258-C-8722002	APR/V 6x50	100	2.400
EL-0260-C-8722003	APR/V 6x60	100	2.400
EL-0270-C-8722004	APR/V 8x60	50	1.200
EL-0280-C-8722005	APR/V 8x80	50	1.200
EL-0290-C-8722006	APR/V 8x100	50	1.200
EL-0300-C-8722007	APR/V 8x120	25	600
EL-0310-C-8722008	APR/V 8x135	25	600
EL-0320-C-8722009	APR/V 8x160	25	600
EL-0330-C-8722010	APR/V 10x 80	25	600
EL-0340-C-8722011	APR/V 10x100	25	600
EL-0350-C-8722012	APR/V 10x115	20	480
EL-0360-C-8722012	APR/V 10x135	20	480
EL-0370-C-8722013	APR/V 10x160	20	2.400



### APR



### APR/V TE



### APS



### APS/V

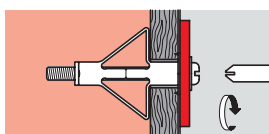


### APS/V TE



## CAVITY ANCHOR

### ETPV



## SPRING TOGGLE

### ETAF



### ETAF/OC



### ETAF/V



### ETAF/OA



# CABLE TIES & NYLON PLUGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## GRAVITY TOGGLE

ETR



ETR/DD



ETR/OA



## UNIVERSAL FRAME ANCHOR

TE



TER W



TE/V TORX



## PLASTERBOARD FIXINGS

DRIVA NYLON



DRIVA PLUS



## HEAVY DUTY ANCHORS

LE



LE/B - LEX/B



LE/BP



LE - ZINC CHROMATE STEEL ANCHOR/ ONLY BODY

packed in box

Code	Description	Pcs/Pack	Pcs/Carton
EL-0476-C-8716011	LE 8	100	800
EL-0477-C-8716012	LE 10	50	400
EL-0478-C-8716013	LE 12	25	200
Stainless Steel A2			
EL-0479-C-8716014	LEX 8	100	800
EL-0480-C-8716015	LEX 10	50	400
EL-0481-C-8716016	LEX 12	25	200

# HOTSHRINK TUBINGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## EV 100

EV 100 is a thin wall heat shrinkable tubing in cross-linked polyolefin, economic, suitable for electrical insulation and general applications where a low shrinking temperature is required.  
Available in reel, dispenser box, 1 mtr. length.



### TECHNICAL DATA

Shrinking ratio: 2: 1.  
Diameters available: from  $\varnothing$  1,6 mm to  $\varnothing$  50,8 mm.  
Colours available: black.  
Working temperature:  $-30^{\circ}\text{C} \div 105^{\circ}\text{C}$ .  
Shrinking temperature:  $> 90^{\circ}\text{C}$ .  
Flammability rating: not self-extinguishing.  
Longitudinal change: +5%; -10%.  
Dielectric strength:  $> 20 \text{ kV/mm.a}$

### APPLICATIONS

Insulation, protection and identification cables and joints.

### BENEFITS

Halogen-free.



### LINKED PRODUCTS

Heat guns & accessories



# HOTSHRINK TUBINGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## ET 100

ET 100 is a thin wall heat shrinkable tubing in cross-linked polyolefin, self-extinguishing, flexible and strong, with chemical resistance and safety in the electrical insulation, suitable for general applications.  
Available in reel, dispenser box, 1 mtr. length.



## TECHNICAL DATA

Shrinking ratio: 2: 1.  
Diameters available: from  $\varnothing$  1,2 mm to  $\varnothing$  101,6 mm.  
Colours available: black, white, red, blue, transparent, green/yellow.  
Working temperature:  $-55^{\circ}\text{C} \div 135^{\circ}\text{C}$ .  
Shrinking temperature:  $> 90^{\circ}\text{C}$ .  
Flammability rating: self-extinguishing UL 224 (except transparent).  
Longitudinal change: -5%; +5%.  
Dielectric strength:  $> 20$  kV/mm.



## APPLICATIONS

Insulation, protection and identification cables and joints.

## BENEFITS

Self-extinguishing.

# HOTSHRINK TUBINGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## EL 100

EL 100 is a flexible, self-extinguishing thin wall heat shrinkable tubing in cross-linked polyolefin, suitable for professional applications in electrical and electronics sectors, in particular for cable insulating, marking, and identification. EL 100 ensures an excellent flame resistance.

Available in reel and box dispenser.



### TECHNICAL DATA

Shrinking ratio: 2: 1.  
Diameters available: from  $\varnothing$  1,6 mm to  $\varnothing$  101,6 mm.  
Colours available: black.  
Working temperature:  $-55^{\circ}\text{C} \div 135^{\circ}\text{C}$ .  
Shrinking temperature:  $> 90^{\circ}\text{C}$ .  
Flammability rating: self-extinguishing UL 224 - VW1.  
Longitudinal change: -5%; +5%.  
Dielectric strength:  $> 20$  kV/mm.

### APPLICATIONS

Insulation, protection and identification cables and joints.

### BENEFITS

High self-extinguishing.



### LINKED PRODUCTS

Heat guns & accessories



# HOTSHRINK TUBINGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## ET 301

ET 301 is a thin wall heat shrinkable tubing in cross-linked polyolefin, self-extinguishing, flexible and strong, with chemical resistance and good capacity of electrical insulation, suitable for general applications. Thanks to its high shrinking ratio, more applications can be covered with the same diameter. Its high expansion ratio is designed for use when wide ranging substrate diameters need to be covered.

Available in reel, dispenser box, 1 mtr. length.



### TECHNICAL DATA

Shrinking ratio: 3: 1.  
Diameters available: from  $\varnothing$  1,5 mm to  $\varnothing$  39 mm.  
Colours available: black.  
Working temperature:  $-55^{\circ}\text{C} \div 135^{\circ}\text{C}$ .  
Shrinking temperature:  $> 90^{\circ}\text{C}$ .  
Flammability rating: self-extinguishing UL 224.  
Longitudinal change: +1%; -10%.  
Dielectric strength:  $> 20$  kV/mm.

### APPLICATIONS

Insulation, protection and identification cables and joints.

### BENEFITS

High shrinking ratio.  
Self-extinguishing.



### LINKED PRODUCTS

Heat guns & accessories



# HOTSHRINK TUBINGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## ASSORTIBOX ET 100 with multifunctional gas tool



### TECHNICAL DATA

Technical data tubing: see ET 100.  
Ø Int. sleeves (mm): from 1,2/0,6 to 19,1/9,5.  
Length sleeves (mm): 50/100/200.  
Colours sleeves: black, transparent, blue, red, white, green/yellow.  
Total: 406 pcs / 21.700 mm.  
Working temperature: -55°C ÷ 135°C.  
Shrinking temperature: > 90°C.  
Flammability rating: self-extinguishing UL 224, 125°C (except transparent).  
Longitudinal change: -5%; +5%.  
Dielectric strength: > 20 kV/mm.

## ASSORTIBOX ET 301 with multifunctional gas tool



### TECHNICAL DATA

Technical data tubing: see ET 301.  
Ø Int. sleeves (mm): from 1,5/0,5 to 24/8.  
Length sleeves (mm): 40/80/120/170.  
Colours sleeves: black, blue, red, white, green/yellow, brown.  
Total: 170 pcs / 10.640 mm.  
Working temperature: -55°C ÷ 135°C.  
Shrinking temperature: > 90°C.  
Flammability rating: self-extinguishing UL 224, 125°C.  
Longitudinal change: +1%; -10%.  
Dielectric strength: > 20 kV/mm.



# HOTSHRINK TUBINGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## EL 301A WITH ADHESIVE

EL 301A is a flexible, heat shrinkable tubing in cross-linked polyolefin, with thermoplastic adhesive inside suitable for professional applications, such as insulation, identification and protection of wires and cables, in electric and electronic components. Its high shrinking ratio and its inner liner allow to seal and encapsulate the inner components, covering sections of different dimensions.

Available in dispenser box, 1 mtr. length (reel on request).



## TECHNICAL DATA

Shrinking ratio: 3: 1.  
Diameters available: from  $\varnothing$  3 mm to  $\varnothing$  24 mm.  
Colours available: black.  
Working temperature:  $-55^{\circ}\text{C} \div 110^{\circ}\text{C}$ .  
Shrinking temperature:  $> 100^{\circ}\text{C}$ .  
Flammability rating: self-extinguishing (external wall).  
Longitudinal change: +1%; -15%.  
Dielectric strength:  $> 20$  kV/mm.

## APPLICATIONS

Insulation and protection cables and joints.

## BENEFITS

Excellent insulating and waterproofing properties.



## LINKED PRODUCTS

Heat guns & accessories



# HOTSHRINK TUBINGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## EL 401A WITH ADHESIVE

EL 401A is a flexible, heat shrinkable tubing in cross-linked polyolefin, with thermoplastic adhesive inside suitable for professional applications, such as insulation, identification and protection of wires and cables, in electric and electronic components. The high shrinking ratio and the thermoplastic adhesive inner liner allow to seal and encapsulate components, covering sections of different dimensions. Available in 1 m cut length (reel on request).



## TECHNICAL DATA

Shrinking ratio: 4: 1.  
Diameters available: from  $\varnothing$  4 mm to  $\varnothing$  52 mm.  
Colours available: black.  
Working temperature:  $-55^{\circ}\text{C} \pm 110^{\circ}\text{C}$ .  
Shrinking temperature:  $> 100^{\circ}\text{C}$ .  
Flammability rating: self-extinguishing (external wall).  
Longitudinal change: +1%; -15%.  
Dielectric strength:  $> 20$  kV/mm.

## APPLICATIONS

Insulation and protection cables and joints.

## BENEFITS

High shrinking ratio.  
Excellent insulating and waterproofing properties.



## LINKED PRODUCTS

Heat guns & accessories



# HOTSHRINK TUBINGS



ELEMATIC

[www.elematic.it](http://www.elematic.it)

## EM 100A WITH ADHESIVE

EM 100A is a medium wall heat shrinkable tubing in cross-linked polyolefin, with internal thermoplastic adhesive, suitable for a wide range of applications, such as insulating and protecting cable joints and terminations. The inner liner provides good moisture sealing and weathering protection. Good strain and abrasion resistance.

Available in plastic bag 1 mtr. length.



### TECHNICAL DATA

Shrinking ratio: 3:1.  
Diameters available: from  $\varnothing$  12 mm to  $\varnothing$  180 mm.  
Colours available: black.  
Working temperature:  $-40^{\circ}\text{C} \div 120^{\circ}\text{C}$ .  
Shrinking temperature:  $> 110^{\circ}\text{C}$ .  
Flammability rating: not self-extinguishing.  
Longitudinal change: -10%.  
Dielectric strength:  $> 17$  kV/mm.

### APPLICATIONS

Insulation and protection cables and joints. Insulation and protection cables and joints also in underground laying.

### BENEFITS

High mechanical resistance.  
Excellent insulating and waterproofing properties.



### LINKED PRODUCTS

Heat guns & accessories



# .5. SEALANTS, ADHESIVES & CHEMICALS

- 1- ONE-PART POLYURETHANE SEALANTS
- 2- FIRE-STOPPING SYSTEMS
- 3- TWO-PARTS POLYURETHANE SEALANTS (SELF LEVELING)
- 4- BACKING RODS
- 5- CONSTRUCTION SILICONE SEALANTS
- 6- GLUE FOR MARBLE & GRANITE
- 7- TILE ADHESIVES & TILE GROUTS

# ONE-PART POLYURETHANE SEALANTS



POLY TI

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## DESCRIPTION

Poly TI is a high performance one part Polyurethane sealant weather-resistant, non-sagging, and water tight with excellent adhesion properties designed for use in all types of joints, vertically and horizontally. Poly TI has a movement capability of  $\pm 25\%$  of the joint width, making it ideal for joints.

## USE

Single component, elastomer polyurethane sealant for expansion joints.

## APPLICATIONS

- Expansion joints in heavy and light prefabrication and traditional masonry.
- Sealing joints for facade panels, curtain walls, boarding, exterior wood finishing.
- Joints between frame and preframe, between door frame and masonry.
- Adheres on a majority of building supports: concrete, glass, anodized aluminium, wood...

## TEST REPORT

- by the laboratories POURQUERY: Permeability to vapour.

## TYPICAL PROPERTIES

Composition	1-part polyurethane, moisture curing
Consistency	Smooth and pasty
Skin formation	~ 60 minutes (+23°C / 50% r.h.)
Curing rate	2-3 mm/24 hours (+23°C / 50% r.h.)
Movement Capability	25%
Specific Gravity	1.23 - 1.25
Sag flow	0 mm, very good
Service temperature	-40°C to +70°C
Tensile strength	>200 psi
Tear strength	~ 6 N/mm (+23°C / 50% r.h.)
Shore A Hardness	~ 30 after 28 days (+23°C / 50% r.h.)
E- Modulus	~ 0.4 N/mm <sup>2</sup> at 100% elongation (+23°C / 50% r.h.)
Elongation at break	> 500% (+23°C / 50% r.h.)
Elastic recovery	> 70% (+23°C / 50% r.h.)
VOC	~ 36 gpl

Chemical resistance (as an indication): to water, cleaning agents, accidental spills of oils and hydrocarbons, accidental spills of acids and diluted bases. Because of the sensitivity of polyurethanes to UV, clear colours may change over time. This modification is only aesthetic and it does not affect the mechanical properties of the cured product.



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## INSTRUCTION FOR USE

### SURFACE PREPARATION:

All joints need to be absolutely clean. For concrete, sand blasting is recommended. All curing compounds, caulks, grease, water proofing compounds etc. need to be removed. For non porous surfaces such as glass, metal etc. cleaning with M.E.K or Toluene is recommended. Polyethylene rod or polyurethane foam is recommended as a joint filler and back up material. Fillers treated with bituminous products, grease or oil should not be used. Where present they need to be removed or separated by vinyl tape or polyethylene film.

A preliminary test is necessary on siliconized tiles. It is up to the users to check the compatibility with the surface in terms of adherence, chemical compatibility and staining (make a pre-test if required).

Size correctly the joint according to the predictable movements and to the capacity of movement.

The width of the joint shall be included between 6 and 40 mm. For the width of joint lower or equal to 10 mm, the depth of the joint shall be equal to its width. For the widths of joints superior to 10mm the depth of the joint shall be equal in the middle of its width.

## APPLICATION:

- If necessary, apply in a thin layer the polyurethane primer. We recommend to use the primer on supports mortars or likened to which the aspect of surface gets closer some mortar (surface ribband and absence of roughness).
- After the primer is cured, press a flexible backfilling rod that will not adhere to the sealant. The bottom of joint should not show notches likely to cause bubbling. Protect the edges of the joint by adhesive tape for a better finishing.
- Apply the sealant in one layer for joints of small width, in three layers for joints of large width, the two first onto the edges of the joint and the third onto the bottom. Smooth with water free of additives. Press the sealant correctly against the edges and the bottom of the joint while avoiding the air bubbles inclusion. Remove the masking ribbons.
- Cleaning of the material with the White Spirit before drying. The cured sealant come out by scratching.
- Can be later painted after full curing. Use rather paintings in dispersal (acrylic, vinyl) and realize a preliminary test. The movement of the joint can entail the crack of the painting.

## STANDARD CONDITIONING OF THE PRODUCT

### PACKAGING:

- sausage 600 ml
- 12 sausages per box

### STANDARD COLOURS:

- white
- grey
- beige

### CONSUMPTION:

joint width must be designed to suit the movement capability of the sealant. A width to depth ratio of ~ 2: 1 need to be maintained.

### Standard design dimensions for concrete elements as per DIN 18 540 /table 3:

Joint distance	2 m	2-3.5 m	3.5-5 m	5-6.5 m	6.5-8 m
Design joint width	15 mm	20 mm	25 mm	30 mm	35 mm
Min. joint width	10 mm	15 mm	20 mm	25 mm	30 mm
Joint depth	8 mm	10 mm	12 mm	15 mm	15 mm

Minimum joint width for perimeter joints around windows: 10 mm

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All joints need to be properly designed and dimensioned by the main contractor in accordance with the relevant standards, because changes are not usually feasible after construction. The basis for calculation of the necessary joint width is the technical values of the joint sealant and the adjacent building materials, plus the exposure of the building, its method of construction and its dimensions

## APPROXIMATE CONSUMPTION

Joint width	10 mm	15 mm	20 mm	25 mm	30 mm
Joint depth	8 mm	8 mm	10 mm	12 mm	15 mm
Joint length / 600 ml	~ 7.5 m	~ 4.5 m	~ 2.5 m	~ 1.6 m	~ 1.3 m

## STORAGE CONDITIONS

- 9 months from production date, in original unopened packaging and protected from humidity.
- Store in a well ventilated room and at temperature between 10-25°C.

## RECOMMENDATIONS:

Our technical advices on the use of the product are expressed either orally, in writing or by means of tests.

They are given to the best of our knowledge. They constitute simple indications which do not engage our responsibility. These values are given as an indication only and they cannot, in any case, be regarded as specifications.

Insofar as it is not possible for us to control the use of the product and taking into account the diversity of materials and the possible uses, the users will have to carry out the tests necessary to determine if the product is suited for the specific use for which it is intended.

It is up to the users to respect local legislation and to obtain the homologations and authorizations that are eventually required.





# FIRE-STOPPING SYSTEMS



STI

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## LCI INTUMESCENT FIRESTOP SEALANT

LCI Intumescent Sealant is a product designed to seal a wide range of through-penetrants against the spread of fire, smoke, toxic gasses and water. This sealant is designed to adhere to virtually all construction surfaces and penetrant materials. It may be applied using standard caulking equipment or by troweling. It has excellent caulking properties on vertical or overhead surfaces. It will not separate or shrink when dried. It contains no solvents.

### PHYSICAL PROPERTIES

Highly intumescent – up to 10x

- Water based – for easy installation and cleanup
- Water resistant
- Auto bonding – allows fresh sealant to adhere to cured sealant
- Endothermic properties
- Non-halogenated, no solvents, no asbestos, no PCBs, low VOC content
- No shrinkage when dried
- Sound Insulation (STC 62)
- Color – red



REF	VOLUME	TYPE	QUANTITY	WEIGHT (KG)
LCI300	300 ml	Tube	12	0.50
LCI320	592 ml	Sausage	12	0.90
LCI305	19.0 L	Pail	1	27.3

## SSS INTUMESCENT FIRESTOP SEALANT

SSS Intumescent Sealant is a product designed to seal a wide range of through-penetrants against the spread of fire, smoke, toxic gasses and water. It is a two stage intumescent technology product, which expands aggressively to quickly close off voids left by the burning or melting of combustible materials.

This sealant is designed to adhere to virtually all construction surfaces and penetrant materials. It may be applied using standard caulking equipment or by troweling. It has excellent caulking properties on vertical or overhead surfaces. It will not separate or shrink when dried. It contains no solvents.

### PHYSICAL PROPERTIES

- Two stage intumescent – extremely fast and directionalized expansion
- Water Based – for easy installation and cleanup
- Water resistant
- Auto bonding – allows fresh sealant to adhere to cured sealant
- Endothermic properties
- Non-halogenated, no solvents, no asbestos, no PCBs, low VOC content
- High solids formula – no shrinkage when dried
- Sound Insulation (STC 62)
- Color – red



REF	VOLUME	TYPE	QUANTITY	WEIGHT (KG)
SSS100	300 ml	Tube	12	0.50
SSS120	592 ml	Sausage	12	0.90
SSS102	7.6 L	Pail	1	11.4
SSS105	19.0 L	Pail	1	27.3

# FIRE-STOPPING SYSTEMS



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## ES ELASTOMERIC FIRESTOP SEALANT

ES Elastomeric Sealant is a non-halogenated latex-based, highly elastomeric caulk designed to provide passive smoke and fire protection in construction joints. It is engineered to restore sound attenuation properties to sound-rated ceilings and partitions. This sealant is designed to adhere to virtually all construction surfaces and may be applied using standard caulking equipment or by troweling. Its premium latex binder system is totally resistant to water and will not re-emulsify after drying.

### PHYSICAL PROPERTIES

- Water based – for easy installation and cleanup
- Water resistant
- Paintable
- Non-halogenated, no solvents, no asbestos, low VOC content
- Auto bonding – allows fresh sealant to adhere to cured sealant
- Thixotropic – for high-build application
- High movement capabilities (25%)
- Sound insulation (STC 62) – tested as acoustical sealant



REF	VOLUME	TYPE	QUANTITY	Color	WEIGHT (KG)
ES100	300 ml	Tube	12	Light Blue	0.50
ES100R	300 ml	Tube	12	Red	0.50
ES120	592 ml	Sausage	12	Light Blue	0.90
ES120R	592 ml	Sausage	12	Red	0.90
ES105	19.0 L	Pail	1	Light Blue	28.2
ES105R	19.0 L	Pail	1	Red	28.2

## CS FIRESTOP CABLE SPRAY

Cable Spray is an intumescent, latex-based spray applied coating designed to protect grouped electrical cables against the propagation of fire. This material will limit flame spread and provide short-term circuit integrity during a fire situation. It is engineered to adhere well to virtually all cable jacketing materials and may be applied using airless spray equipment or with a brush. Its premium latex binder system is totally resistant to water and will not re-emulsify after drying.

### PHYSICAL PROPERTIES

- Intumescent – expands with heat
- Water based – for easy installation and cleanup
- Water and weather resistant
- Non-halogenated, no solvents, no asbestos, low VOC content
- Auto bonding – allows fresh sealant to adhere to cured sealant
- Thixotropic – for high-build application
- Flexible
- High solids formula
- Low abrasion – for longer pump life and less maintenance
- Color – white



REF	VOLUME	TYPE	QUANTITY	WEIGHT (KG)
CS105	19.0 L	Pail	1	25.00

# FIRE-STOPPING SYSTEMS



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## AS ELASTOMERIC FIRESTOP SPRAY

AS Elastomeric Spray is a non-halogenated, latex based, highly elastomeric spray coating designed to provide passive smoke and fire protection in construction joints, curtain wall gaps and certain penetrations. This spray is designed to adhere to virtually all construction surfaces and may be applied using airless spray equipment or with a brush. Its premium latex binder system is totally resistant to water and will not re-emulsify after drying.

### PHYSICAL PROPERTIES

- Water based – for easy installation and cleanup
- Water resistant
- Paintable
- Non-halogenated, no solvents, no asbestos, low VOC content
- Auto bonding – allows fresh spray to adhere to cured spray
- Low abrasion – for longer pump life and less maintenance
- Thixotropic – for high-build application
- High movement capabilities (25%)
- Sound insulation (STC 61)
- Tested with spray applied fire resistive materials (SFRM)
- Color – light blue or red



REF	VOLUME	TYPE	QUANTITY	Color	WEIGHT (KG)
AS205	19.0 L	Pail	1	Light Blue	22.7
AS205R	19.0 L	Pail	1	Red	22.7

## SIL SILICONE FIRESTOP SEALANT

SIL Silicone Sealant is a one-part neutral curing silicone sealant designed to provide passive smoke and fire protection in construction joints and through-penetration applications. This sealant is designed to adhere to virtually all construction surfaces and may be applied using standard caulking equipment or by troweling. It reacts with atmospheric moisture to form a tough durable seal. This material can also insulate openings to prevent damage from occasional water spillage and dust penetration in sensitive areas.

### PHYSICAL PROPERTIES

- Water resistant – for water-tight sealing
- Auto bonding – allows fresh sealant to adhere to cured sealant
- Ozone and UV Resistant – for outside applications
- Excellent chemical resistance
- Excellent smoke seal
- High movement capabilities (50%)
- Sound insulation (STC 61)
- Low VOC
- Color – concrete



REF	VOLUME	TYPE	QUANTITY	WEIGHT (KG)
SIL300	300 ml	Tube	24	0.5
SIL320	592 ml	Sausage	12	0.92
SIL305	17.0 L	Pail	1	24.7
SIL320SL	592 ml	Sausage	12	0.92
SIL305SL	17.0 L	Pail	1	24.7

# FIRE-STOPPING SYSTEMS



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## LC ENDOTHERMIC FIRESTOP SEALANT

LC Endothermic Sealant is a latex-based, high solids firestop compound. This material will seal non-combustible through-penetrants and joints against the spread of fire, smoke, toxic gasses and water.

It is engineered to adhere to virtually all construction surfaces and may be applied using a standard caulk gun or by troweling. Its premium latex binder system is totally resistant to water and will not re-emulsify after drying.

### PHYSICAL PROPERTIES

- Water based – for easy installation and cleanup
- Water resistant
- Endothermic fillers – absorbs heat and release water
- Non-halogenated, no solvents, no asbestos, low VOC content
- Auto bonding – allows fresh sealant to adhere to cured sealant
- High solids formula – no shrinkage
- Thixotropic – for high-build application
- Flexible
- Sound insulation (STC 61)
- Color – red



REF	VOLUME	TYPE	QUANTITY	WEIGHT (KG)
LC150	300 ml	Tube	12	0.43
LC120	592 ml	Sausage	12	0.87
LC155	19.0 L	Pail	1	26.3

# TWO-PARTS POLYURETHANE SEALANTS (SELF LEVELING)

DYMERIC 240

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## PRODUCT DESCRIPTION

Dymeric 240 is a gun grade, multi-component, chemically curing, polyurethane sealant that includes a tintable base, curative packet, and a choice of 70 standard colors.



## FEATURES / BENEFIT

Dymeric 240 is an all around general-purpose sealant that provides flexible, long life and durable waterproofing for both new construction and restoration projects

## APPLICABLE STANDARDS

Dymeric 240 meets or exceeds the requirements of the following specifications:

- ASTM C-920, Type M, Grade NS, Class 50, Use T, NT, M, A, and O
- Federal Specification TT-S-00227E, Type II, Class A
- CAN/CGSB 19.24-M90, Type II, Class B

## PACKAGING

1.5 gallon (5.7L) kits with pre-measured packs of curing agent.

## COLORS

Dymeric 240 is available as a base and curative that can be tinted to your choice of 70 different colors, or we can match a special color for you.

## COVERAGE RATE

308 linear feet of joint per gallon for 1/4" x 1/4" joints. For specific coverage rates that include joint size, and usage efficiencies, visit our website usage calculator at [www.tremcosealants.com](http://www.tremcosealants.com)

## PRIMING

Where deemed necessary, use Tremco Primer #171 for porous substrates and TREMprime Non-Porous Primer for metals and plastics. Dymeric 240 typically adheres to common construction substrates without primers; however, Tremco always recommends that a mock-up or field adhesion test be performed on the actual materials being used on the job to verify the need for a primer. The field adhesion test can be found in appendix X1 of ASTM C 1193, Standard Guide for Use of Joint Sealants or for the Tremco Field Adhesion Bulletin visit our website at [www.tremcosealants.com](http://www.tremcosealants.com)

## CURE TIME

At 72°F (22°C) and 50% relative humidity, Dymeric 240 will reach full cure in 4 days regardless of the applied width and depth of bead. As the temperatures decrease, the cure time of Dymeric 240 will increase. A good rule of thumb is an additional 24 hours for every 10°F decrease in temperature

## JOINT DESIGN

Dymeric 240 may be used in any vertical or horizontal joint designed in accordance with accepted architectural/ engineering practices. Joint width should be 4 times anticipated movement, but not less than 1/4" (6.4mm).

# TWO-PARTS POLYURETHANE SEALANTS (SELF LEVELING)

DYMERIC 240

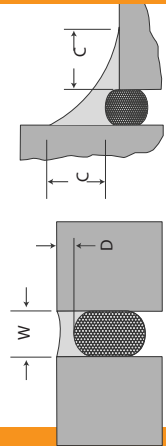
[www.unipro-ikk.com](http://www.unipro-ikk.com)

## SEALANT DIMENSIONS

W = Sealant width, D = Sealant depth, C = Contact area.

**EXPANSION JOINTS** - The minimum width and depth of any sealant application should be 1/4" by 1/4" (6mm by 6mm). The depth (D) of sealant may be equal to the width (W) of joints that are less than 1/2" wide. For joints ranging from 1/2" to 1" (13mm to 25mm) wide, the sealant depth should be approximately one-half of the joint width.

The maximum depth (D) of any sealant application should be 1/2" (13mm). For joints that are wider than 1" (25 mm) contact Tremco's Technical Service Department, or your local Tremco field representative. Tremco recommends that surface temperatures be 40°F (5°C) or above at the time the sealant is applied. If sealant must be applied in temperatures below 40°F, please refer to the Tremco Guide for Applying Sealants in Cold Weather that can be found on our website at [www.tremcosealants.com](http://www.tremcosealants.com).



## TYPICAL PHYSICAL PROPERTIES

(Results of recent testing at 72°F (22°C) after 14 days cure time)

Low Temperature Flexibility	(ASTM C 793)	-65°F (-54°C)
Hardness, durometer scale "A"	(ASTM C 661)	35-40
Weight Loss	(ASTM C 1246)	Passes
Skin Time	(tooling time)	3-4 hours
Tack Free Time	(ASTM C 679)	64 hours
Stain & Color Change	(ASTM C 510)	No stain, No color change
Adhesion-in-Peel	(ASTM C 794)	>10 pli (pass)
Accelerated Weathering	(ASTM C 793)	Pass
Movement Capability	(ASTM C 719 modified)	±50%
Tear Strength	(ASTM D 412)	29 psi
Tensile Strength	(ASTM D 412)	138 psi
Ultimate Elongation	(ASTM D 412)	398%
25% Modulus	(ASTM D 412)	24 psi
50% Modulus	(ASTM D 412)	33 psi
100% Modulus	(ASTM D 412)	52 psi

## JOINT BACKING

Closed cell or reticulated polyethylene backer rod is recommended as joint backing to control sealant depth and to ensure intimate contact of sealant with joint walls when tooling. Where depth of joint will prevent the use of backer rod, an adhesive backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at time of sealant application.

## CLEAN UP

Excess sealant and smears along the joint interface can be cleaned up or removed with xylene or mineral spirits before the sealant skins. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

## APPLICATIONS

Mix Dymeric 240 in accordance with instructions on the pail using the entire pre-measured curative and your selected Universal Color Pak. One color pack should be used with 1.5 gallon pails and two color packs should be used in the 3 gallon pails. Mix all three parts for a minimum of 6 minutes, scrapping the sides of the pail and until there are no color striations. Ensure the backer rod is friction fitted properly and any primers have been applied. Apply sealant with conventional caulking equipment filling the joint from the backer rod up. Immediately tool the sealant with a spatula to ensure intimate contact with the joint walls. Dry tooling is always preferred, although xylene can be used in limited amounts to slick the spatula if needed. For a cleaner finish, mask the sides of the joint with tape prior to filling.

## LIMITATIONS

- Do not apply Dymeric 240 to damp or contaminated surfaces.
- Always utilize the accompanying MSDS for information on Personal Protective Equipment (PPE), and health hazards.
- For best results, always use a Universal Color Pak.

# BACKING RODS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## DESCRIPTION

UNIPRO Closed-Cell Backer-Rod is a closed-cell, polyethylene foam joint filler and backing for elastomeric sealants. Its resilience accommodates dynamic joints.

## COMPLIANCES

- ASTM C 1330, Type C

## SIZES

- Ø 5 to 50mm

## BENEFITS

- Low moisture absorption
- Installs easily and quickly
- Accepts joint movement
- Will not discolor sealants or substrates
- Compatible with cold-applied sealants
- Gives proper shape to sealant for effective function
- Requires no additional bondbreaker

## FEATURES

- Closed-CELL Backer-rod
- Closed-cell polyethylene foam
- Lightweight
- Resilient
- Nonimpregnated, nonstaining, and nonbleeding
- Inert
- Round
- Nonadhering to sealants

## WHERE TO USE

- Application
- Backing for sealants
- Precast panel joints
- Expansion joints
- Window-and door-frame perimeters
- Coping joints
- Glazing joints
- Isolation joints
- Control joints





# BACKING RODS

www.unipro-ikk.com

## TECHNICAL DATA

Properties	Test method
Color	White/Grey
Density	35Kg /cm3 approx.
Service Temperature	-70 ° C to 90 ° C under normal usage
Weather Resistance	Will be degraded by prolonged exposure to U.V.
Heat Shrinkage	< 1 % (after 96 hours at 80 ° C)
Storage Requirements	Store flat, preferably under cover
Minimum Closed Cell	> 97%
Thermal Coefficient	0.035 Kcal/mh ° C @ 20 ° C / 0.04 W/M ° C @ 20 ° C
Ageing Stability	No structural change after 10 thermal cycles (-70 to 90 ° C)
Water Vapour Transmission	< 4 g/sqm/24 hours/50mm
Water Absorption	< 1% V/V after 24 hours total immersion
Tear Strength	10 N/sq cm (average based on 10mm)
Flammability	Will burn with very low toxic fumes and smoke emission (Carbon Dioxide and water vapour approx. 99% of combustion products).
Toxicity	Non-toxic under normal conditions of use.

## HOW TO APPLY

### Application

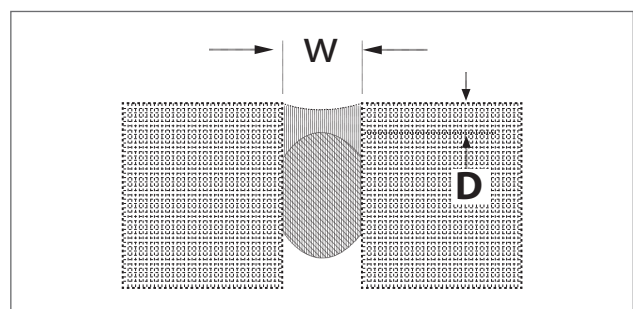
- Joint filters have three major functions:
  - To control the depth of the sealant in proper relation to joint width
  - To provide a backing against which the sealant is applied, forcing the sealant to the sides of the joint
  - To prevent 3-sided bonding, ensuring proper functioning of the joint sealant
- To install, compress backer-rod into the joint before sealants are applied
- Install backer-rod using a blunt probe or a plain-faced roller to force the rod to the desired depth.
- A template or roller gauge may be used to control the depth at which the rod is placed.
- DO NOT stretch backer-rod during installation but gently force into the joint so that the backer-rod fits tight against the sides of the joint.

## APPROPRIATE BACKER-ROD SIZE

### SIZING CLOSED-CELL BACKER-ROD

- For joint widths up to 19mm (¾"), the diameter of the rod should be 3 mm (1/8") larger than the width of the joint.
- For 19 mm (¾") wide joints, use 25mm (1") diameter rod.

## APPLICATION



# CONSTRUCTION SILICONE SEALANTS



EAGLE SEAL

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## PRODUCT DESCRIPTION

Eagle Seal Silicone.

Medium modulus acetoxy silicone sealant.

This sealant is ready to use. After suitable joint preparation and masking, the sealant is gunned into place and tooled within 5 minutes, using a spatula which has been dipped in a soapy water.

Masking tape is then removed immediately. Uncured material can be removed by using a suitable solvent or an approved sealant remover. Cured material may be removed by abrasion or other mechanical means.

## APPLICATIONS

Eagle seal is a one-part acetic moisture curing silicone sealant suitable for general construction sealing applications. Eagle seal acetoxy silicone is resistant to moisture. It has excellent resistance to aging, shrinkage, cracking and discoloring.

## JOINT DESIGN

The sealant joint width should be designed to accommodate the movement capability of the sealant. In general, the minimum joint width should be 6mm. For joints between 6 – 12mm wide, a seal depth of 6mm is recommended. For joints above 12mm wide, a width to depth ratio of 1:1 should be used, up to a maximum depth of 15mm. For joint dimensions greater than 25mm, please contact Unitech's Technical Services Department. In situations where fillet joints are needed, a minimum of 6mm sealant bite to each substrate is recommended. Bond breaker tape or backer rod should be used as back up material to provide back pressure and avoid three-sided adhesion that limits sealant movement capability.



## SURFACE PREPARATIONS

Surface shall be clean, dry and free from grease, dust and frost. Non-porous surfaces: Aluminum, glass etc., should be cleaned with a suitable solvent Isopropanol for instance, and metal surfaces can be improved by using a primer.

## ATTENTION

Before handling, read product informations.

## TYPICAL PROPERTIES

See Table 1.



# CONSTRUCTION SILICONE SEALANTS



## EAGLE SEAL

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### EXPIRATION AND STORAGE

When stored at or below 30°C in the original unopened cartridges this product has an expiration period of 24 months from the date of production. Unitech will guarantee the expiration period of this product until the date indicated on the packaging. This date is shown by the letters "EXP" (meaning Expiry) followed by 6 digits, which stand for the month (last day) and year. Example: "EXP 05/2017" means use by 31 May 2017.

### LIMITATIONS

Eagle Seal acetoxy silicone sealant is not recommended for porous substrates such as concrete, stone or marble. Do not use Eagle seal silicone sealant on bituminous substrates, substrates based on natural rubber, chloroprene or EPDM or on building materials which might bleed oils, plasticizer or solvents.

### PACKAGING

Eagle Seal Silicone Sealant is available in 280ml cartridge in a box of 24.

TABLE 1

Property	Unit	Value
Cure system		Acetoxy
Standard colors		Transparent, White, Black & Bronze.
Application temperature	°C	+5 to +40
Specific gravity	g/cm <sup>3</sup>	1.02
Extrusion rate	g/min	510
Skin-over time (23°C, 50% R.H.)	minutes	11
Track-free time (23°C, 50% R.H.)	minutes	20
Cure rate (23°C, 50% R.H.)		
1 day	mm	1.5
3 days	mm	4.0
2mm thickness S2 dumb-bells (ASTM D412)		
E-Modulus 100%	MPa	0.56
Tensile strength	MPa	1.90
Elongation at break	%	500
12*12* 50mm size T.A. joint (ISO 8339/DIN2-8339)		
E-Modulus 100%	MPa	0.44
Tensile strength	MPa	0.49
Elongation at break	%	125
Hardness (Shore A)		24

# GLUE FOR MARBLE & GRANITE



## EAGLE MASTIC

[www.unipro-ikk.com](http://www.unipro-ikk.com)

Eagle Mastic (2-components polyester) is a synthetic resin-based adhesive with a specific weight between 1.1 and 1.65 gram/cm<sup>3</sup>.

### TYPICAL PROPERTIES

- Specially formulated for use in gluing and filling of all types of marbles, stones and granites.
- Suitable for all types of work, including anchoring of anchor bolts.
- Used most of all in the building industries, especially for natural marble and/or stone coatings and floors.
- Used to glue marbles or to fill all those materials with a porous surface
- Used to fill joints of the floors made with marble slabs so that after hardening, the surface would be ready to be polished.



### TECHNICAL SPECIFICATIONS

Technical Specifications	
Storage	1 year well sealed in it's original container
Hardness	1.800 kp/cm (DIN 53456)
Pot life at 20°C	20 minutes
Tensile Strength	900 kp/cm (DIN 53455)
Bending Strength	1.500 kp/cm (DIN 53152)
Compressive Strength	1.500 kp/cm (L-P-4066)
Accelerated Ageing at 50°C	30 days
Behavior	Same as the marble where it is applied



# TILE ADHESIVES & TILE GROUTS

## UNIFIX 401

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### PRODUCT DESCRIPTION

**Unifix 401** is a premixed cement base water resistant mortar for fixing ceramics and glass tiles on walls and floors.

### APPLICATIONS

**Unifix 401** is applied internally and externally on fair face concrete, bricks and blocks.

### COMPOSITION

**Unifix 401** consists of high quality portland cement, clean classified silica quarts, synthetic resins and additives to improve adhesion, workability and reduction of water permeability.

### CHARACTERISTICS

- For indoor and outdoor use.
- Easy to apply.
- Rapid hardening.
- Economical.
- Weather resistant.

### STANDARDS

**Unifix 401** complies with ANSI 118.1, DIN 18560 & BS 5980 standards.

### COVERAGE RATE

20 Kg bag covers 5.5 - 7.5 m<sup>2</sup> depending on coat thickness and tile size.

### STORAGE

12 months from manufacturing date, subject to proper storage conditions.

### PACKAGING

20 kgs bags.



### APPLICATION PROCEDURE

For instructions, see back side of the product.

### ADVANTAGES

- Economic and easy to use. Just add water.
- Simplicity of usage gives a very high productivity rates. Due to its superior adhesion properties and workability it can fix ceramic tiles on different surfaces (ex: fair face concrete, blocks, bricks, gypsum boards, etc...)
- Raw materials are selected according to the highest quality control standards.

### TYPICAL PROPERTIES

See Table 1.

### HEALTH & SAFETY

While using the product, gloves and goggles shall be worn. Splashes to skin or eyes should be washed with clean water. In case of prolonged irritation, seek medical advice.

### PACKAGING

20 kg bags

### TABLE 1- TECHNICAL SPECIFICATIONS

Color	White
Thickness	3 mm for small size ceramic
Water addition	5 - 5.5 liters per 20 kg bag
Pot Life	15 minutes
Density	1.8 Kg/Ltr



# TILE ADHESIVES & TILE GROUTS

## UNIFIX 402

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### PRODUCT DESCRIPTION

Unifix 402 is a cement-based, polymer-modified tile adhesive mortar, for indoor and outdoor applications, especially for submerged conditions and where heavy trace is present.

### APPLICATIONS

- Suitable for stone cladding up to 50 kg/m<sup>2</sup>.
- Suitable for fixing different substrates such as concrete, gypsum plaster board, block walls, lightweight blocks and plastered walls.
- Ideal for swimming pools, bathrooms, shower rooms, and kitchens in private and public buildings.

### CONSUMPTION

Unifix 402 is a premix of finely selected raw materials, comprising clean silica sand, Portland cement, and selected additives to enhance bonding characteristics.

### CHARACTERISTICS

- Resistant to substrate vibrations.
- Water and temperature resistant.
- For indoor and outdoor use.
- High bond strength to all tile types and critical surfaces.
- High sag resistance.
- Economical.
- Long open time.
- For adhesive thickness from 2 mm to 8 mm.

### STANDARDS

Unifix 402 formulated comply to DIN 18156,BS, ASTM & ANSI 118.4 standards

### TECHNICAL SPECIFICATIONS

Color	White
Thickness	2 - 8 mm
Water addition	5 - 5.5 liters per 20 kg bag
Duration	15 minutes
Density	20 kg/bag



### PACKING

20 kg/bag



# .6. DECORATIVE AND PARTITIONING SOLUTIONS

- 1- STUDS & RUNNERS
- 2- GYPSUM BOARDS & ACCESSORIES
- 3- RADIATION PROTECTION
- 4- CEMENT BOARDS & ACCESSORIES
- 5- DECORATIVE BOARDS



# STUDS & RUNNERS

www.sfsp-ikk.com

## MATERIALS

Pre-galvanized steel complying with:

- BS EN 10142:2000 instead of BS 2989
- ASTM C645 G90 (275 g/sqm) - G60 (180 g/sqm) - G40 (120 g/sqm) - G20 (60 g/sqm)
- ASTM C754 G90 (275 g/sqm) - G60 (180 g/sqm) - G40 (120 g/sqm) - G20 (60 g/sqm)
- DIN EN 10326:2004-09
- BS EN 10143:2006

References:

ASTM C1047 : Standard specification for Gypsum Wallboard and Gypsum Veneer Base Accessories.

## CERTIFICATES



## PARTITION PROFILES

STUDS are vertical profiles inserted into the RUNNERS; bearing profiles of the partition; used for fixing of partition covering (Gypsum Boards).

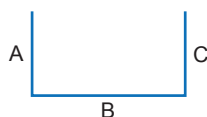
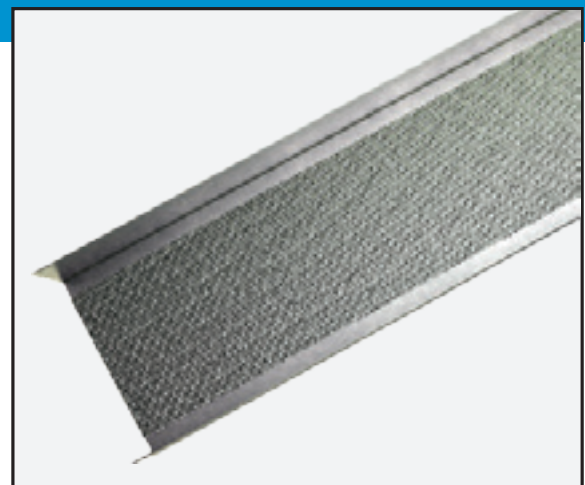
RUNNERS are horizontal profiles to fix the partition to floor and ceiling.

## CODES & DIMENSIONS

### STUDS

Code	Size	Dimensions			Length (m)	Thickness (mm)
		A	B	C		
SVCTCS_F_00198863	52	25	51	25	3 - 12	0.6 -1.5
SVCTCS_F_00239477	66	25	65	25	3 - 12	0.6 -1.5
SVCTCS_F_00239481	72	25	71	25	3 - 12	0.6 -1.5
SVCTCS_F_00239489	77	25	76	25	3 - 12	0.6 -1.5
SVCTCS_F_00239577	94	25	93	25	3 - 12	0.6 -1.5
SVCTCS_F_00239581	104	25	103	25	3 - 12	0.6 -1.5
SVCTCS_F_00239585	127	25	126	25	3 - 12	0.6 -1.5
SVCTCS_F_00239589	154	25	153	25	3 - 12	0.6 -1.5

Other Lengths up to 6 Meters can be produced on request



A and C available 25 - 36 mm  
B will be available according to site request

# STUDS & RUNNERS

www.sfsp-ikk.com

## CODES & DIMENSIONS

### RUNNERS

Code	Size	Dimensions			Length (m)	Thickness (mm)
		A	B	C		
SCUC_F_00198851	50	32	49	32	3 - 12	0.6 -1.5
SCUC_F_00239593	64	32	63	32	3 - 12	0.6 -1.5
SCUC_F_00239599	70	32	69	32	3 - 12	0.6 -1.5
SCUC_F_00239605	75	32	74	32	3 - 12	0.6 -1.5
SCUC_F_00240305	92	32	91	32	3 - 12	0.6 -1.5
SCUC_F_00240311	102	32	101	32	3 - 12	0.6 -1.5
SCUC_F_00240317	125	32	124	32	3 - 12	0.6 -1.5
SCUC_F_00240323	152	32	151	32	3 - 12	0.6 -1.5

Other Lengths up to 6 Meters can be produced on request



A and C available 25 - 36 mm  
B will be available according to site request

## SUSPENDED CEILING SYSTEM

A suspended ceiling has several names as well. Also Known, as a false ceiling or secondary ceiling or a hung ceiling. The suspended ceiling is very widely used in modern construction, especially in offices and basements. A suspended or false ceiling is widely used in modern construction especially in commercial, educational, and health care centers. It provides the convenience for the passage of MEP installation, as well as communication means.

### RUNNERS

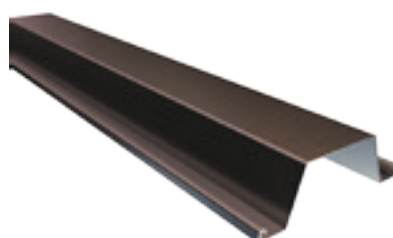
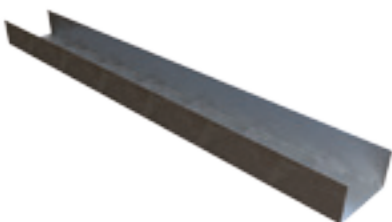
The metal framing members of the ceiling grid are called main ceiling channel. Main ceiling channel is hung from above by suspension hanger. They run between the wall angles and form the support system for the suspended ceiling.

### FURRING CHANNEL

Furring channel: also known as cross furring. They run perpendicular to the main ceiling channel and are connected to it with a wire connection clip. Furring channels are used to support the ceiling panel (Gypsum Board)

### PERIMETER ANGLE

This "L" shaped mouldings form the perimeter of ceiling. They ensure a finished edge where the ceiling meets the wall and establish the level of ceiling. Perimeter angles are set on all sides of the ceiling and should overlap on inside corners- Miter the wall angle on outside corners.



# GYPSUM BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## DESCRIPTION

Gypsum boards are widely used for internal walls and ceilings, and are manufactured by calcining gypsum into a plaster, making a slurry from the plaster, and passing the slurry through machines which shape, set, and cut into a board.

Gypsum boards are produced from high purity natural gypsum core being sheeted in a closely adhering best-selected special cardboard.

## STANDARDS

Gypsum Boards are manufactured according to EN-520, ASTM C 1396 and DIN 18180 standards. Concerning fire resistance boards, comply with DIN 4102, UL 263 and ASTM E119-88.



## SPECIFICATIONS

	9.5 mm	12.5 mm	15 mm	18 mm
Thickness	9.5 mm	12.5 mm	15 mm	18 mm
Weight Kg/m <sup>2</sup>	7.0 to 7.2	9.2 to 9.5	11.0 to 11.4	13.2 to 13.7
Fire Rated Period	33 Mins	45 Mins	60 Mins	80 Mins
Water Absorption	5 - 8 %	5 - 8 %	5 - 8 %	5 - 8 %

# GYPSUM BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## TYPES

### 5 separate types are available:

- Regular Gypsum Boards
- Fire Resistant
- Moisture Resistant
- Moisture & Fire Resistant
- Laminated with Lead Sheets Boards

## EDGES

- Tapered edge boards (This type is common and convenient to use. Paper tapes are fixed between the edges of two boards.
- Squared edge boards (Untapered edge).
- Beveled edge boards (Are produced on demand).

## PANEL DIMENSIONS

Gypsum boards are of standard width of 1200 mm and a length from 1800 mm to 4500 mm. Gypsum Boards' thicknesses of 9.5 mm, 12.5mm, 15mm and 18mm are available.

## CHEMICAL PROPERTIES OF REGULAR GYPSUM

CHEMICAL PROPERTIES	
Contents	%
Free Water	
Combind Water	5
Insoluble Residue + Si O <sub>2</sub>	0.97
Aluminum Oxide + Ferric Oxide	0.6
Total Calcium Oxide	34
Magnesium Oxide	0.1
Sulphate Trioxide	42
Sodium Chloride	0.06



## PHYSICAL PROPERTIES OF REGULAR GYPSUM BOARDS

PHYSICAL PROPERTIES	
Contents	%
Finesess mm 0.045	65
Finesess mm 0.063	26
Finesess mm 0.09	14
Finesess mm 0.125	6
Finesess mm 0.2	5
Finesess mm 0.3	Zero
Comb. Water	5
Initial Setting Time	5.9 mm
Gypsum Ratio	70
Bending Strength (7 days)	4 N/mm <sup>2</sup>





# RADIATION PROTECTION

UNITECH LEAD SHEET

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## PRODUCT DESCRIPTION

Lead is generally the most cost-effective radiation shielding material that protects against the effects of gamma rays and x-rays. The properties of lead shielding which makes it an excellent shielding material is its density, high atomic number, high level of stability, ease of fabrication, high degree of flexibility in application and its availability.

## CHARACTERISTICS

Our Lead Sheets are extremely resistant to corrosion from the atmosphere, salt water and most industrial chemicals. Lead Sheets are built into a variety of structures such as walls, doors, window frames and cabinetry to provide the necessary shielding protection.

Lead Sheets can be readily manipulated with standard hand tools without the risk of fracture.

SPECIFICATIONS	
Standard Size	1 x 2 m *
Sheet Thickness	2 mm , 2.5 mm
Weight	22.68 Kg/Sqm, 28.35 Kg/Sqm
Standards	ASTM B-29, B-749 BSEN 12588:2006
Fire Resistance	Melts at 327.4°C

\* Other sizes & thicknesses can be made upon request.



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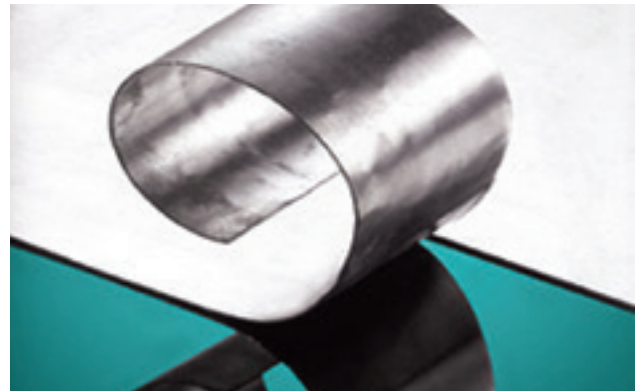
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## USAGE

**LEAD SHEETS ARE OFFERED FOR MANY APPLICATIONS THAT INCLUDE:**

- Radiation shielding
- Laboratories
- Hospitals
- Dental offices and veterinary clinics
- Construction
- Roofing, flashing and waterproofing
- Corrosion protection
- Acid storage and handling
- Autoclaves
- Precipitators
- Movable Lead screens
- Sound barriers and soundproofing
- Nuclear energy shielding
- Tank lining
- Vibration absorbers



### CHEMICAL COMPOSITION:

Silver	0.0009% max
Copper	0.03/0.05% max
Antimony	0.005% max
Zinc	0.001% max
Bismuth	0.005% max
Other Elements	0.02% max
Lead	Balance

### PHYSICAL DETAILS

Atomic Weight	207.2
Atomic Number	82
Density	11.34g cm
Co-efficient of linear Expansion	0.0000293 per c
Thermal Conductivity	34.76 wmc
Melting Point	327.4

# CEMENT BOARDS

## U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### U-BOARDS PRODUCT RANGE

U-Boards products are manufactured according to international standards .

- 1- Fiber Cement Boards
- 2- Magnesium Oxide Boards
- 3- Calcium Silicate Boards



### FIBER CEMENT BOARDS

Fiber cement boards are manufactured from cellulose fiber, portland cement, quartz sand, additives and water; It is non asbestos, formaldehyde, benzene and other harmful substances and with excellent physical and chemical characteristics. These boards are non combustible, fire and water resistant, green and environmental friendly, highly efficient and energysaving.



INGREDIENT	PERCENTAGE OF RANGE (%)
Portland Cement	34%
Aluminum Oxide	4%
Lime	4%
Quartz Powder	38%
Water	8%
Cellulose fiber	12%

TOLERANCE	
Length to tolerance	+/- 5MM
Width tolerance	+/- 5MM
Thickness tolerance	+/- 0.3MM
Diagonal tolerance	+/- 5MM



# CEMENT BOARDS

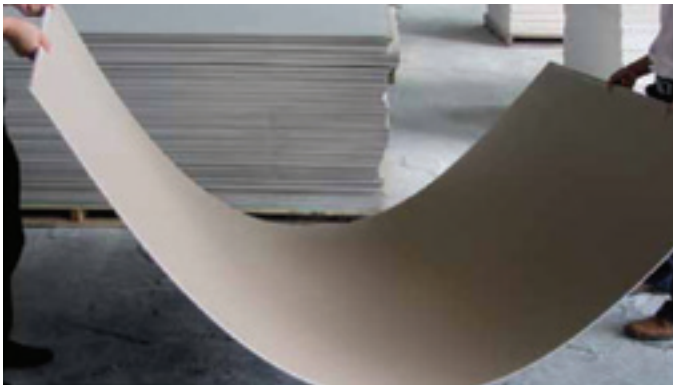
## U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### MAGNESIUM OXIDE BOARDS

Magnesium oxide boards are used in place of traditional gypsum drywall as wall and ceiling covering material and sheathing. It is also used in a number of other construction applications such as: fascias, soffit, shaft-liner & area separation, wall sheathing, and as tile backing (backer board) or as substrates for coatings and insulated systems such as Finish Systems.

It is suitable for a wide range of general building uses and for applications that require fire resistance, mold and mildew control, as well as sound control applications and many other benefits. Magnesium oxide board are available in various sizes and thickness. It is not a paper faced material. It generally comes in light gray, white or beige in color.



INGREDIENT	PERCENTAGE OF RANGE (%)
Portland Cement	34%
Aluminum Oxide	4%
Lime	4%
Quartz Powder	38%
Water	8%
Cellulose fiber	12%

### CALCIUM SILICATE BOARDS

Calcium silicate board reinforced with selected cellulose fibers and fillers. It is 100% free from asbestos, sepiolite, inorganic fibers or formaldehyde. The board is versatile and suitable for use in a wide range of internal and semi exposed external applications in building construction projects.

Calcium silicate passive fire protection board being clad around steel structure in order to achieve a fire-resistance rating. It is an economical building board material with fireproofing property to replace concrete or block wall for the construction of non load bearing elements.

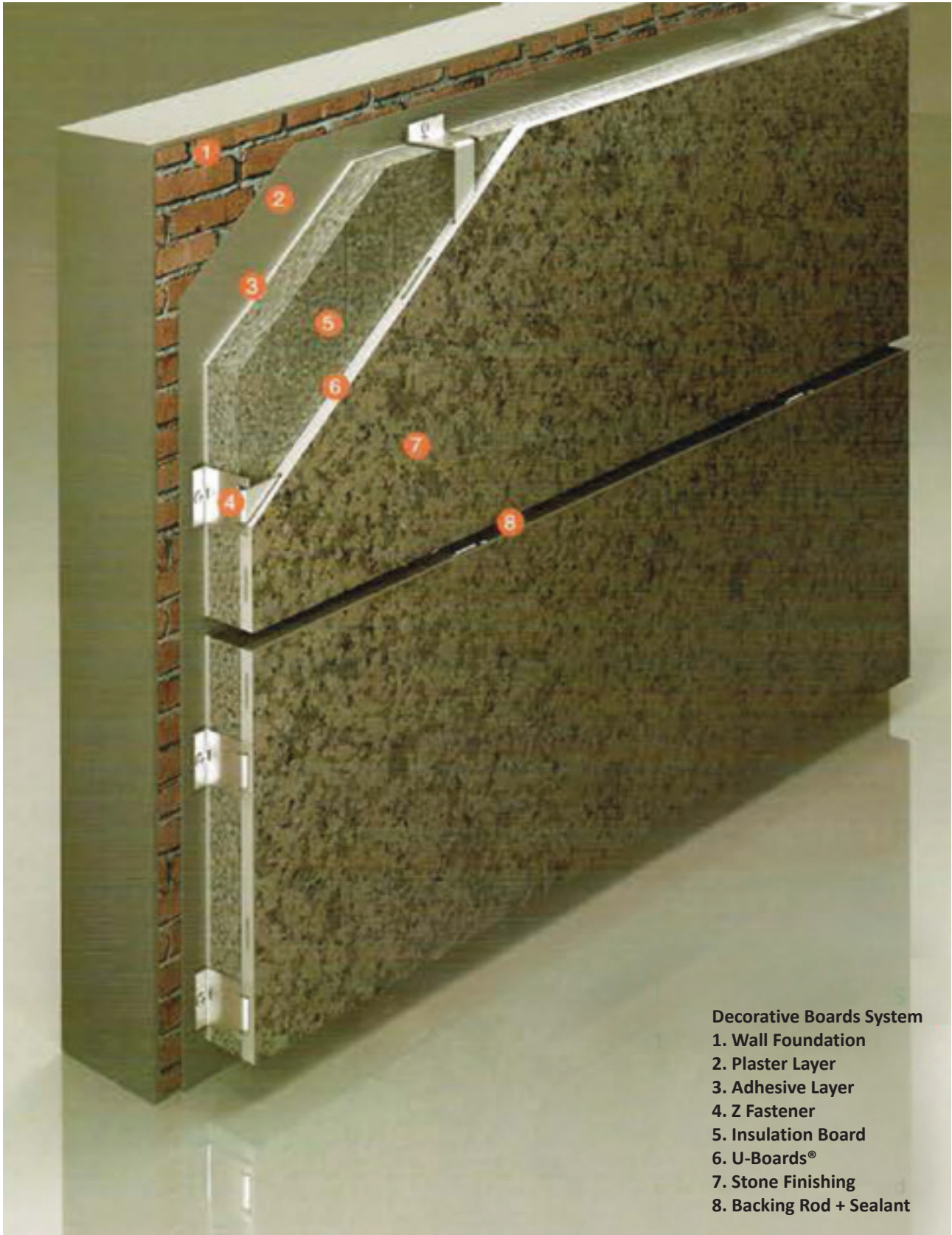
INGREDIENT	PERCENTAGE OF RANGE (%)
CEMENT	34%
ALUMINUM OXIDE	4%
CALCIUM SULFATE	4%
QUARTZ POWDER	38%
WATER	8%
WOOD FIBER	12%



# DECORATIVE BOARDS

U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)



## Decorative Boards System

1. Wall Foundation
2. Plaster Layer
3. Adhesive Layer
4. Z Fastener
5. Insulation Board
6. U-Boards®
7. Stone Finishing
8. Backing Rod + Sealant

# DECORATIVE BOARDS

## U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### UV MULTICOLOR GRAIN DECORATIVE BOARD

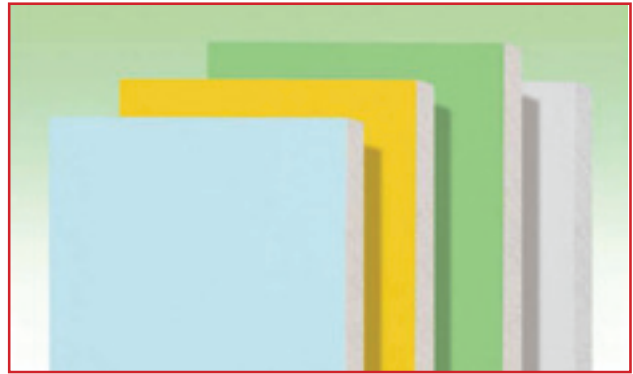
#### UV Multicolor Grain Decorative Board

UV Wood/Stone Grain Decorative Board is made from high density fiber cement board. The surface of the plate is coated with UV multicolor painting of any stone pattern, as smooth as mirror. The board is non-combustible, 100% non-asbestos and non-formaldehyde.



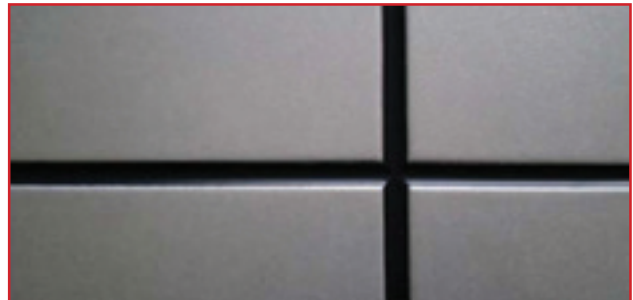
#### UV Coating Decorative Board

UV Coating Decorative Board is made from fiber cement board. The surface of the plate is coated with UV single color painting. The board is non-combustible, 100% non-asbestos, non-formaldehyde. The surface is treated with special waterproof treatment to decrease the possibility of surface pollution.



#### Fluorocarbon Coating Decorative Board

Fluorocarbon coating decorative board is made from high density fiber cement board. The surface of the plate is coated with fluorine resin . The major coating material has a service duration of 25 years. It is steadier having better properties than other paints.



#### Applications:

Can be used in the thermal insulation decoration of high-grade building's interior wall such as big markets, shopping malls, starred hotels, office buildings and industrial exhibition halls ,etc. It is suitable for hospitals, schools, libraries and other building having a high requirements for fireproofing and noise control. It can be used for refurbishment and repairing of old buildings interior wall.



# DECORATIVE BOARDS

U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## TECHNICAL DATA

Size	1200 x 2400/1220 x 2440mm
Thickness	4 mm , 6mm, 9mm, 10mm. 12mm ,16mm
Density	> 1200 kg/m <sup>2</sup>
Corrosion resistant	> 3000 hours in salt fog test
Hardness	> 0.8
Impact strength	7.1 Kg/m <sup>2</sup> (8mm)
Adhesion bond strength	7.9 Kg/m <sup>2</sup> (10mm)
Screws withdraw strength	0.9-1.0N
Fire resistance	up to 2 Hours (ASTM E84, E119, BS EN 12467 , part 4, part 7, part 22) up to 3 hours according to BS Class A 476 , part 6 -part 7 (Upon Request)
Thermal conductivity at 50 0C	≤0.21/W.mK
Service temperatures	-40-140 °C
Sound insulation	27db (6mm)
Service Duration	25 years

\* Different sizes are available upon request.

## SUPERIOR PERFORMANCE:

### 1. Excellent Fire-Resistance Property

U-Boards are a fireproof board ,9mm reach up to 2 hours fireproofing

### 2. Superior Weathering Resistance

Corrosion resistance and Ultraviolet light chalking resistance

### 3. Easy Installation and Maintenance

Cutting and planning, can be done by some simple woodworking tools.  
flexible for designers as the installation work is easy , fast and cost saving.

### 4. Coating & Diversified Colors

With chemosynthesis treatment and film technology, the adhesion between the paint and panel becomes even, having multiple colors. There is more space for your choice to the color with individuality.

### 5. Impact Resistance

Strong impact resistance and toughness . The coating layer cannot be crashed when it' s bent The panel cannot be damaged when in a strong windy and sandy condition.

### 6. Sound and thermal insulation.



# DECORATIVE BOARDS

## U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### ASSOCIATED EQUIPMENTS FOR U-BOARDS' INSTALLATION



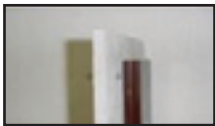
#### CUTTING AND SAWING

Use Normal wood working tools such as traditional handsaw. For shaped cuts, Use a pad saw, keyhole saw or circular saw. Work with fair face upwards and support the board as cutting process progress. For power sawing, use a carbide or diamond tipped blade.



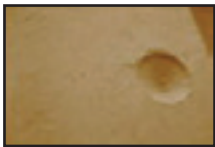
#### DRILLING

Use a hand drill or conventional hand held drill with high steel bits. Always support the board firmly behind the whole location, when drilling. Large holes can be with a tungsten carbide tipped hole drilling socket or by drilling a series of pilot holes and gently tapping out the center with a hammer.



#### PLANNING AND SANDING

Edges of the board can be planned or smoothed with plan, rasp or file. Sand with conventional papers.



#### CONCRETE NAILS

Concrete nails can be driven directly through the board without pre-drilling provided that they are at least 12mm from board edges. Galvanized wire nails are recommended. Do not use lost head nails or panel nails.

Fixing guides: From edge: 12mm minimum, from corner: 40mm minimum compressed air nailing or stapling equipment offers a fast and economical fixing method where large numbers of fixing are required or where production line techniques are being employed.

The nail /staple manufactures recommendations should be followed when selecting nail/ staple types. Test the equipment and adjust the air pressure each time before commencing nailing operations.



#### FIXING

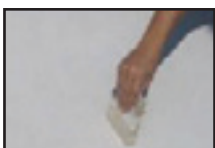
Boards shall be supported on all four edges and intermediate positions at centers not exceeding 610mm. Joints between boards should occur on the centers of the supports. Rust-proofing fixings should be used for all external applications or where conditions of high humidity or dampness are anticipated.

#### SCREWING

When screwing, do not countersink 6mm boards. Pre-drilling is not necessary. Use wood or self-tapping screws, screws should be at minimum 12mm from board edges and 50mm from board corners.

#### JOINTING

The stability of the boards allows butt joint to be used. Alternatively, board can be slightly apart and filled. Joints and crews holes can be filled and sanded to a smooth flat surface.



#### PAINTING

Conventional paints can be used. With water based paints. a diluted first coat should be used. For oil based paints, always use the proprietary primer / top coated systems as recommended by the paint manufacturer.

# DECORATIVE BOARDS

## U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)



### TILING

Minimum 9mm thick boards should be used with textured side out. Supports should be at 400mm centers maximum with cross noggins at traverse board joints. Countersink corrosion resistant screws should be used to fix the boards at 200mm centers. Tiles should be adhered to the board by proprietary adhesive in strict accordance with manufacturers' recommendations.



### COMPATIBILITY

Boards are compatible with most common building materials, non-caustic and is resistant to corrosion, will not affect bituminous compounds; should be protected when in contact with un-anodized aluminum.



## HANDLING AND STORAGE

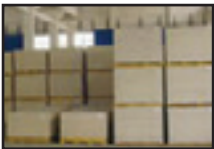
### BOARDS LIFTINGS

Always lift boards off the board below, never slide board on board or drag the stack.



### PROPER HANDLING

Always carry the boards vertically on it's edge . Do not stock on edge.



### INCORRECT HANDLING

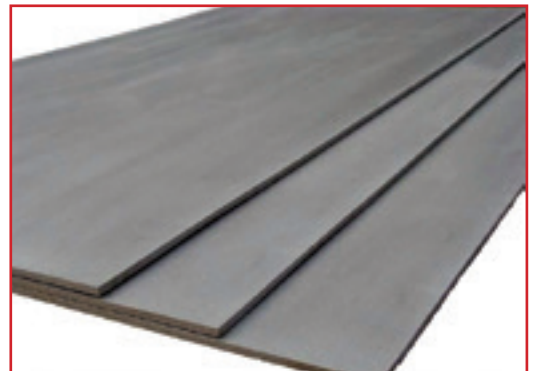
Never carry the boards horizontally. This may cause the board to be easily broken.

### STORAGE

Boards should be stored under cover or in closed area on a flat base. If stored in an open area , the stack should be fully protected from weather conditions. If stored on racks, boards should be fully supported across the width.

### STACKING

Boards are stacked a max of 900mm high on firm level ground. If two or more pallets are stacked, the stack height should not be over 3200mm.

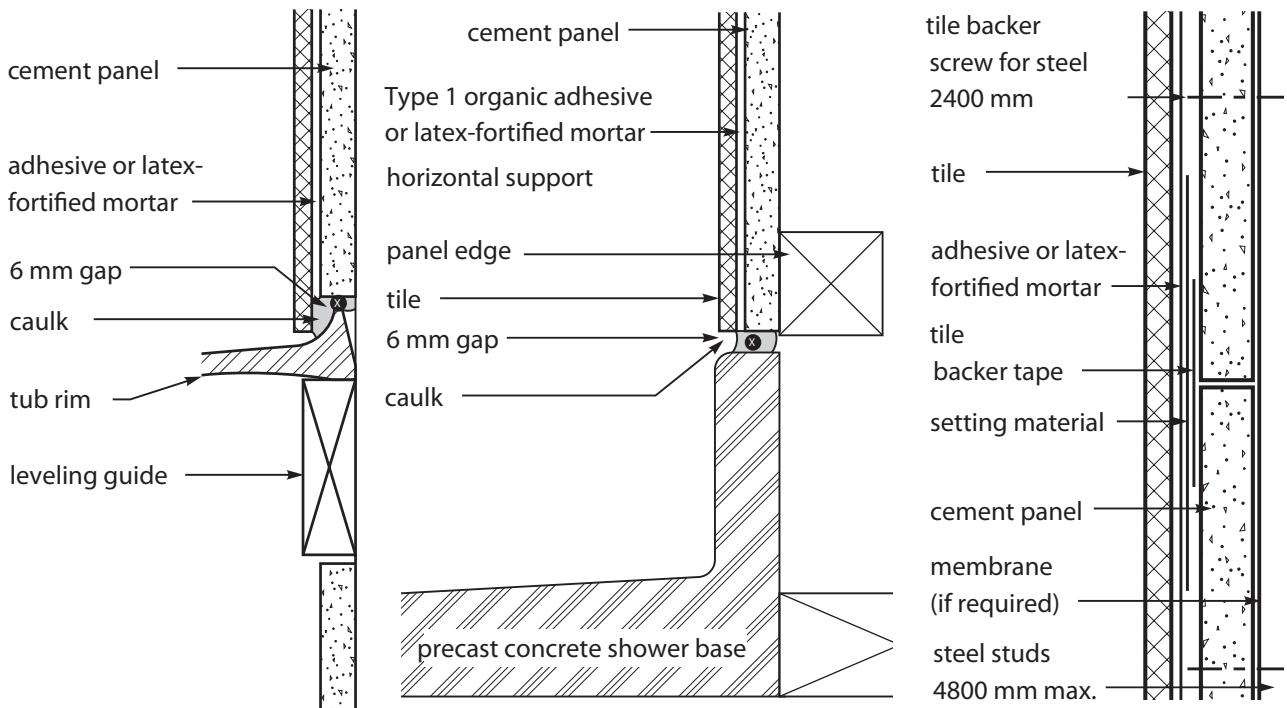


# DECORATIVE BOARDS

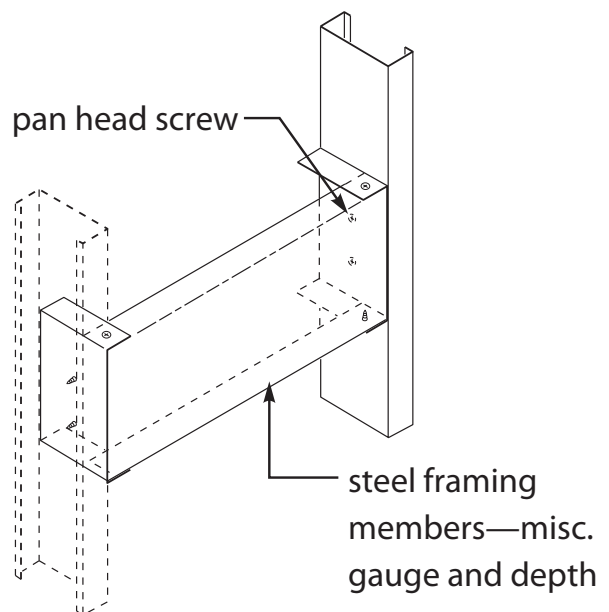
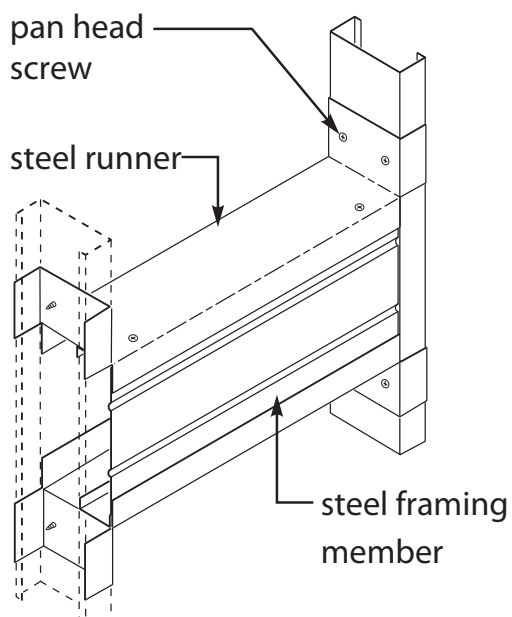
## U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### Walls, Interior and Exterior - Steel Studs



### Fixture Attachment — Steel Framing



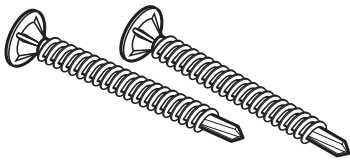


# DECORATIVE BOARDS

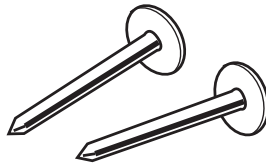
U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

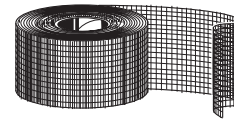
**Tile Backer Screws  
for Steel Framing**



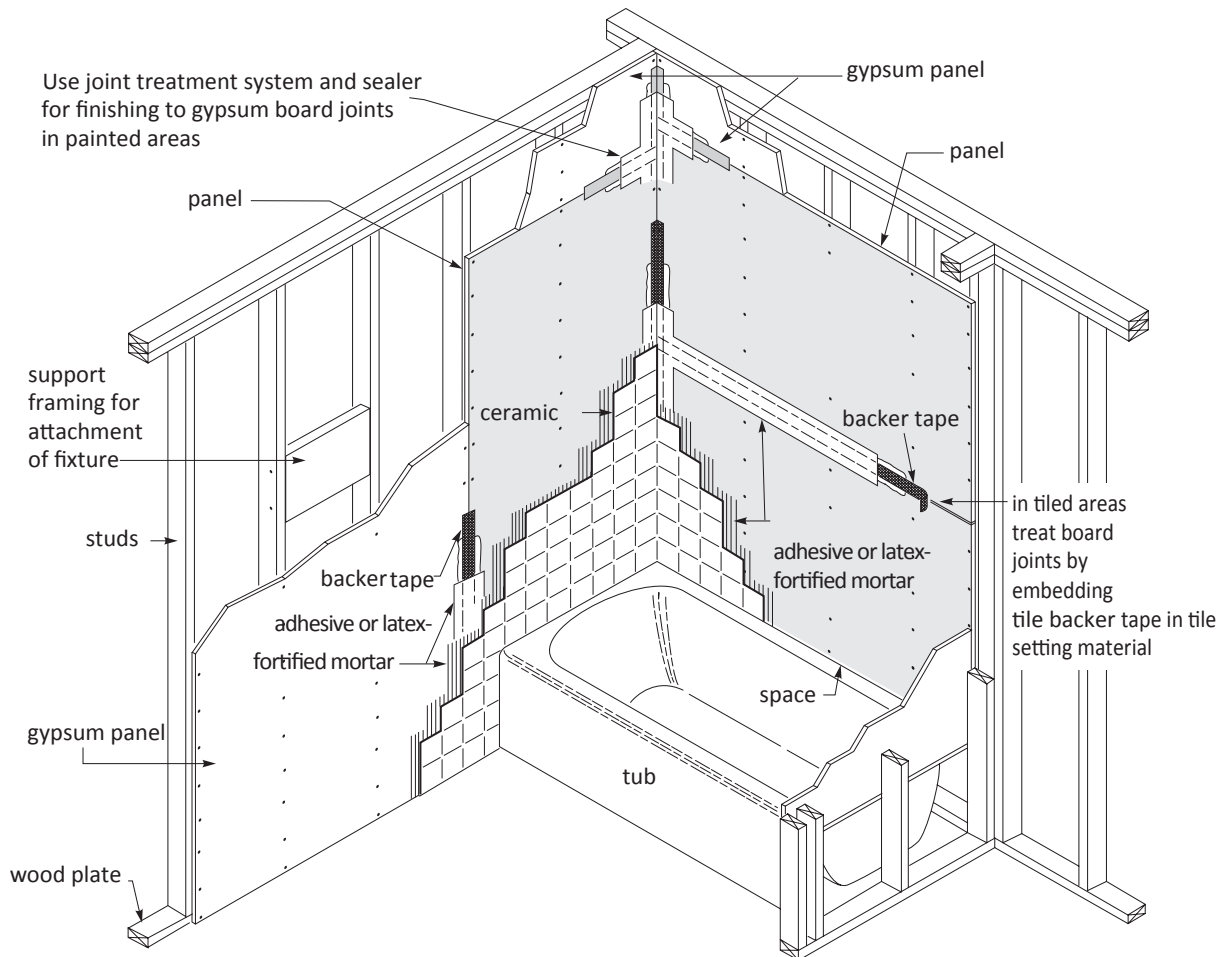
**Hot-Dip Galvanized  
Roofing Nails**



**Resistant Tape**



**Typical bathtub installation**

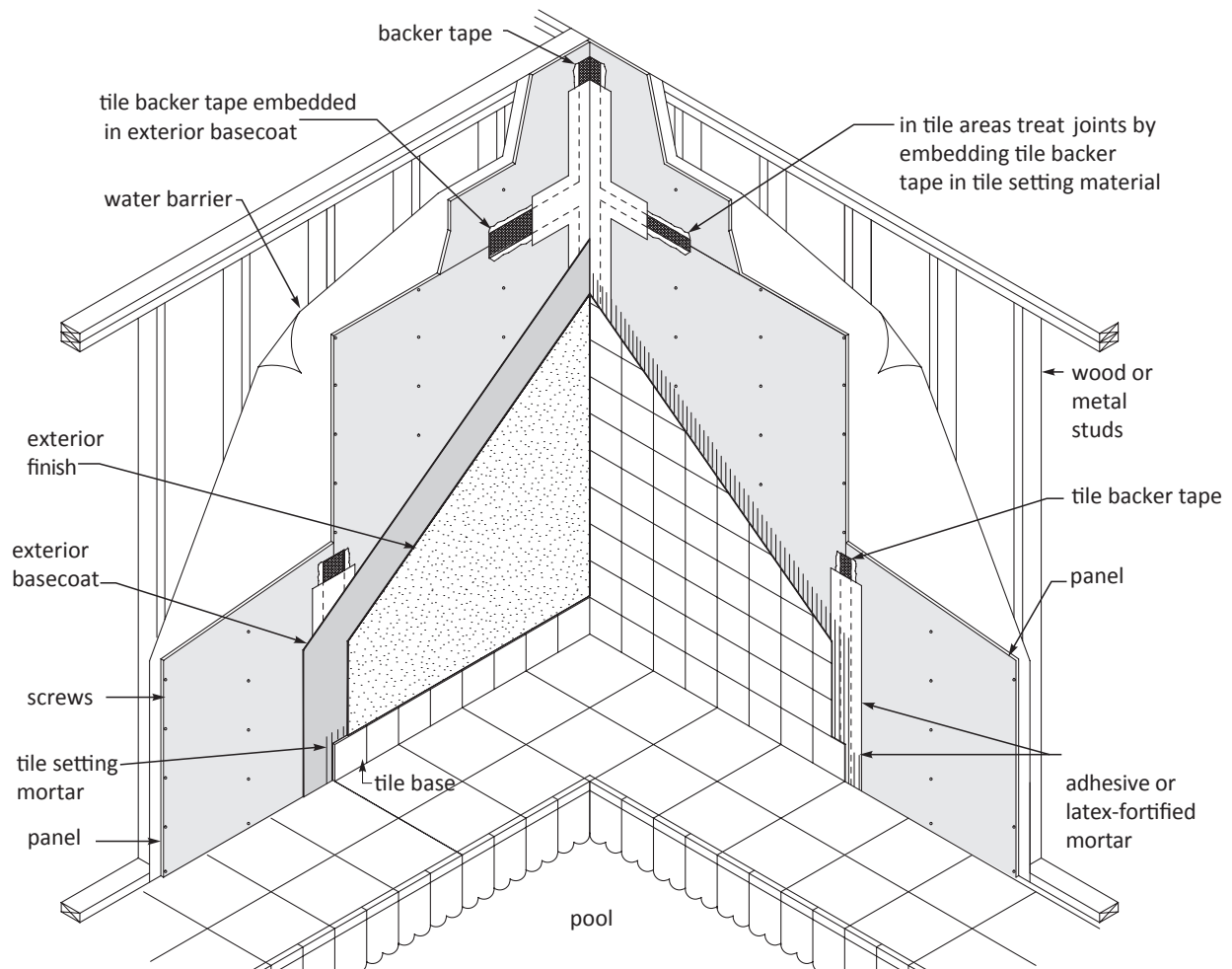


# DECORATIVE BOARDS

## U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### Typical swimming pool installation (tile or exterior finish)



# DECORATIVE BOARDS

U-BOARDS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## Good Design Practices

### 1. SYSTEM PERFORMANCE

**U-Boards®** systems. Our products shall not be used in a design or construction of any given structure without complete and detailed evaluation by a qualified structural engineer or architect to verify suitability of a particular product for use in the structure.

Information in this publication should be used only for **U-Boards®** systems, as physical properties of competitive products may vary. **U-Boards®** assumes no liability for failure resulting from the use of alternative materials or improper application or installation of **U-Boards®** systems as specified herein.

### 2. EXPANSION AND CONTRACTION

Wall surfaces should be isolated with surface control joints (sometimes referred to by the industry as expansion joints) or other means where: (a) a wall abuts a structural element or dissimilar wall or ceiling; (b) construction changes within the plane of the wall; (c) tile and thin brick surfaces exceed 4.8m. Surface control joint width should comply with architectural practices. Location of building control joints is the responsibility of the design professional/architect. Steel framing at building control joints that extend through the wall (with top and bottom runner tracks broken) should have 1-12 mm cold-rolled channel alignment stabilizers spaced a maximum of 1.5 m vertically. Channels should be placed through holes in the stud web of the first two adjacent studs on both sides of the joint and securely attached to the first adjacent stud on either side of the joint. Cement board should be separated at all surface and building control joints. Where vertical and horizontal joints intersect, the vertical joint should be continuous and the horizontal joint should abut it. Splices, terminals and intersections should be caulked with a sealant complying with architectural practices and sealant manufacturer recommendations. Do not apply tile or finishes over caulked sealed expansion joints.

### 3. WATER MANAGEMENT

**U-Boards®** is vapor permeable and does not deteriorate in the presence of water. For interior applications, if a vapor retarder or waterproof construction is specified, a separate barrier shall be applied over or behind the **U-Boards®**.

### 4. SMOOTH SIDE/ROUGH SIDE

**U-Boards®** has a smooth side and a rough side. Although both sides of **U-Boards®** are suitable for either mastic or thin-set mortar applications, as a general guide, use the smooth side for mastic applications and the rough side for mortar applications.

### 5. SHADOWING AND SPOTTING

When the outside temperature differs considerably from the building's interior temperature, airborne dirt can accumulate on the colder regions of walls, causing "shadowing" or "spotting," particularly over fasteners and framing. This is a natural phenomenon that occurs through no fault in the products. Where temperature, humidity and soiling conditions are expected to cause objectionable blemishes, provide a thermal separation between the interior and exterior faces.

## .7. HARDWARE AND TOOLS

- 1- ELECTRICAL POWER TOOLS
- 2- GRINDING / CUTTING BLACK DISCS
- 3- DIAMOND CUTTING BLADES
- 4- SEMI-FLEX ABRASIVE DISCS
- 5- CONCRETE CORING
- 6- STAINLESS STEEL CUTTING & DRILLING EQUIPMENT
- 7- PROFESSIONAL HAND TOOLS & EQUIPMENT
- 8- AIR COMPRESSORS, GENERATORS, BENDING & CUTTING MACHINES

# ELECTRICAL POWER TOOLS



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## AEG ELECTRICAL POWER TOOLS

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[www.unipro-ikk.com](http://www.unipro-ikk.com)

AEG Electrical Power Tools comprise the following range: Hammers, drills, percussion drills and diamond drills, screwdrivers and battery tools, wall chasers, angle grinders and straight grinders, jig saws and circular saws and many more to address the most diverse applications in wood, metal, concrete and block.  
AEG also has its own range of innovative, high-quality accessories designed to perfectly complement AEG power tools.  
[www.aeg-pt.com](http://www.aeg-pt.com)



### HAMMER SYSTEMS

- ROTARY HAMMERS
- COMBI HAMMERS
- LARGE DEMOLITION HAMMERS

### METALWORKING

- SMALL ANGLE GRINDERS
- LARGE ANGLE GRINDERS
- METAL CHOPSAW

### DRILLING SYSTEMS

- PERCUSSION DRILLS
- WALL CHASER
- BATTERY DRILLING

### WOODWORKING

- JIGSAWS
- CIRCULAR SAW
- AIR BLOWER
- HEAT GUN

# ELECTRICAL POWER TOOLS



AEG ELECTRICAL POWER TOOLS

www.unipro-ikk.com

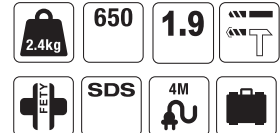
## ROTARY HAMMERS

### BH 22 E SDS-PLUS ROTARY HAMMER

- Powerful 650 watt motor
- 22 mm drilling capacity in concrete
- Safety clutch for user protection
- Variable speed electronics for better control
- Hammer action stop for drilling in wood or metal
- Forward and reverse mechanisms



Article No. 4935 4114 80



### KH 24 E SDS-PLUS COMBI HAMMER

- Powerful 720 watt motor
- 24 mm drilling capacity in concrete
- Rotary stop for light chiselling applications
- Variable speed electronics for better control
- Hammer stop function for drilling in wood or metal
- Forward and reverse mechanisms
- Soft grip handle for comfort



Article No. 4935 3875 00



### KH 24 XE SDS-PLUS COMBI HAMMER

- Powerful 720 watt motor
- 24 mm drilling capacity in concrete
- Rotary stop for light chiselling applications
- FIXTEC quick change chuck
- Safety clutch for user protection
- Variable speed electronics for better control
- Hammer stop function for drilling in wood or metal
- Forward and reverse mechanisms
- Soft handle grip for comfort



Article No. 4935 3875 10

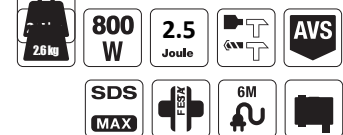


### KH 26 XE SDS-PLUS COMBI HAMMER

- Powerful 800 watt motor
- 26 mm drilling capacity in concrete
- Rotary stop for light chiselling applications
- Safety clutch for user protection
- Variable speed electronics for control
- Hammer stop function for drilling in wood or metal
- Forward and Reverse mechanisms



Article No. 493 542 8180



## COMBI HAMMERS

### PN 3500 X SDS-PLUS COMBI HAMMER

- Powerful 750 watt motor
- 30 mm drilling capacity in concrete
- Rotary stop for light chiselling applications
- Soft hammer mode reduces blow energy and speed for control in chiselling applications
- FIXTEC quick change tool system
- AVS anti-vibration system significantly reduces vibration
- Safety clutch for user protection
- Hammer stop function for drilling in wood or metal



Article No. 4935 4122 10





# ELECTRICAL POWER TOOLS

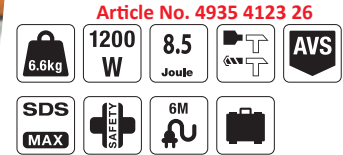


## AEG ELECTRICAL POWER TOOLS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### KH 5 E SDS-MAX COMBI HAMMER

- Powerful 1200 watt motor
- 40 mm drilling capacity in concrete
- Rotary stop for chiselling applications
- Soft hammer mode reduces blow energy and speed
- AVS anti-vibration system significantly reduces vibration
- Safety clutch for user protection
- Soft start for precise start of drilling/ chiselling
- Service light provides in-time notice for worn out brushes



### KH 5 G SDS-MAX COMBI HAMMER

- Powerful 1100 watt motor
- 7.5 J blow energy
- 40 mm drilling capacity in concrete
- Rotary stop for chiselling applications
- Safety clutch for user protection
- Soft start for precise start of drilling/chiselling



### MH 5 E SDS-MAX CHIPPING HAMMER

- Powerful 1200 watt motor
- 8.5 J impact energy for effortless chipping
- Soft hammer mode reduces blow energy and speed for control in chiselling applications
- AVS anti-vibration system significantly reduces vibration
- Soft start for precise start of chiselling
- Service light provides in-time notice for worn out brushes



### MH 5 G SDS-Max Tradesmann Chipping Hammer

- Best power to weight ratio in its class
- 2 mode SDS-Max chipping hammer
- Multi position chisel function gives 12 different positions to optimize working angle
- Robust magnesium gear housing for tough environments, exact seat fitting of gear components for better cooling
- Low vibration construction enhances usage time per day
- Soft grip side handle



### KH 7 E SDS-MAX COMBI HAMMER

- Powerful 1500 watt motor
- 45 mm drilling capacity in concrete
- Rotary stop for chiselling applications
- Service light provides in-time notice for worn out brushes
- FIXTEC quick change tool system
- Safety clutch for user protection
- AVS anti-vibration system
- Soft start for precise start of drilling/chiselling





# ELECTRICAL POWER TOOLS



## AEG ELECTRICAL POWER TOOLS

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### PN 11 E SDS-MAX LARGE COMBI HAMMER

- Powerful 1700 watt motor
- 20 J impact energy for heavy demolition applications
- 50 mm drilling capacity into concrete
- Variable speed electronics
- AVS anti-vibration system significantly reduces vibration
- Safety clutch for user protection
- Soft start for precise start of drilling/ chiselling
- Service light provides in-time notice for worn out brushes
- Automatic cut out carbon brushes
- Soft-grip handles for comfort



Article No. 4935 4124 40



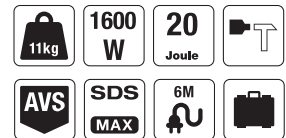
## DEMOLITION HAMMER

### PM 10 E SDS-MAX LARGE DEMOLITION HAMMER

- Powerful 1600 watt motor
- 20 J impact energy for heavy demolition applications
- Variable speed electronics
- AVS anti-vibration system significantly reduces vibration
- Soft start for precise start of drilling/ chiselling
- Service light provides in-time notice for worn out brushes
- Automatic cut out carbon brushes
- Soft-grip on handles for comfort



Article No. 4935 4124 18



## PERCUSSION DRILL

### SBE 500 R PERCUSSION DRILL

- Compact ergonomic design offers excellent handling
- Electronics with variable speed preselection
- Hammer action stop for rotary drilling
- Reverse action mechanisms



Article No. 039 435 001

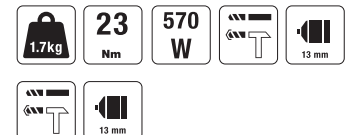


### SBE 570 R PERCUSSION DRILL

- Compact and powerful 570 watt motor
- Compact ergonomic design offers excellent handling
- Variable speed control with forward & reverse mechanism
- Hammer action stop for rotary drilling
- 13 mm metal keyed chuck



Article No. 4935 4126 81

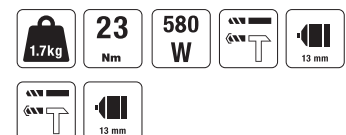


### SBE 580 R PERCUSSION DRILL

- Compact and powerful 580 watt motor
- Compact ergonomic design offers excellent handling
- Variable speed control with forward & reverse mechanism
- Hammer action stop for rotary drilling
- 13 mm metal keyed chuck



Article No. 4935 4126 81



# ELECTRICAL POWER TOOLS



## AEG ELECTRICAL POWER TOOLS

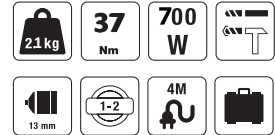
[www.unipro-ikk.com](http://www.unipro-ikk.com)

### SB2 700 PERCUSSION DRILL

- Strong 700 watt motor
- Hammer action stop
- Safety clutch for user protection
- 2-speed gearbox
- Ergonomic soft-grip design for comfort
- Full insulated gear box



Article No. 4935 3424 17



### SB2E 850 RZ PERCUSSION DRILL

- 850 Watt powerful 2 speed percussion drill
- 10 mm shorter than the previous version (235 mm OAL)
- Large switch with speed dial for drilling or light mixing
- Large metal gear case for maximum durability
- 13 mm metal chuck
- Ergonomic soft-grip design for comfort



Article No. 030317002

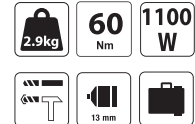


### SB2E 1100 RVZ PERCUSSION DRILL

- Powerful 1100 watt motor
- Anti vibration system for better comfort of use
- Large metal gear case for maximum durability
- Metal chuck 13 mm
- Ergonomic soft-grip design for comfort



Article No. 4935447385



### SB 20 2E PERCUSSION DRILL

- Compact and powerful 750 watt percussion drill
- AVS anti-vibration system for more comfortable use
- Safety clutch for user protection
- 2-speed gearbox for increased torque and versatility
- Ergonomic soft-grip design for comfort
- Variable speed control with forward / reverse mechanism
- Hammer action stop for rotary drilling
- 13 mm metal keyless chuck



Article No. 0301 7001 3



## WALL CHASER

### MFE 1500 WALL CHASER

- Powerful 1500 watt motor
- Electronics with thermal overload protection and soft start
- Variable and adjustable cutting depth for accurate results
- Variable cutting width for versatility
- Bayonet adaptor for dust extraction
- Spindle lock



Article No. 4935 4136 05



# ELECTRICAL POWER TOOLS



AEG ELECTRICAL POWER TOOLS

www.unipro-ikk.com

## DRYWALL SCREWDRIVER

### S 4000 E SCREW DRIVER & MORSE TAPER

- Powerful 720 watt motor for increased productivity
- Compact high drilling screwdriver for drywall application
- Full metal gearbox for durability
- Easily adjustable depth-setting nosepiece for consistent fastener depth
- Forward and reverse mechanism
- Ergonomic design and soft-grip for comfortable handling
- 1/4" hex bit reception
- Belt clip



## CORDLESS TOOLS

### LMG 50 Laser distance meter

- Point and shoot system - one person measuring
- Area, volume, height and width measurement
- Pythagoras 3 types
- Large and easy to read 3 line LCD graphical display
- Measuring pin for corner measurement
- Memory recall for last 10 measurements
- IP54 water & dust protection
- Extremely slim LDM
- Rubber overmold for a perfect handling
- Large rising buttons with intuitive positioning
- Indirect surface measurement



## BATTERY DRILLS

### BS 12C2 12 V DRILL/ DRIVER

- Compact pocket drill/screwdriver
- 17 stage torque adjustment with additional drilling stage
- 2 Speed gearbox for wide range of applications
- Industrial metal gearbox and gears for superior durability
- FIXTEC spindle lock and keyless 10mm chuck
- Electronic switch with variable speed
- Built in LED light illuminates the work surface



Article No. 493 541 1530



### BS 12G2 12 V DRILL/ DRIVER

- Compact pocket drill
- 24-stage torque adjustment for complete control
- 2 Speed gearbox for wide range of applications
- Industrial metal gearbox and gears for superior durability
- FIXTEC spindle lock and keyless 10mm chuck
- Electronic switch with variable speed



Article No. 4935431985



# ELECTRICAL POWER TOOLS



## AEG ELECTRICAL POWER TOOLS

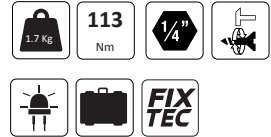
www.unipro-ikk.com

### BS 14G2 14.4 V DRILL/DRIVER

- Compact pocket drill/screwdriver
- 24 stage torque adjustment with additional drilling stage
- 2 Speed gearbox for wide range of applications
- Industrial metal gearbox and gears for superior durability
- FIXTEC spindle lock and keyless 13mm chuck
- Electronic switch with variable speed
- Built in LED light illuminates the work surface



Article No. 4935431988



## SMALL ANGLE GRINDER

### WS 6 - 100 4" Angle Grinder

- Compact powerful 670 watt
- Metal gearbox for durability
- Spindle lock
- Directed air exhaust
- Flat metal gear head for excellent visibility of work piece
- Protected air inlets



Article No. 0390 7500 8



### WS 6 - 115 4.5" Angle Grinder

- Compact powerful 720 watt
- Metal gearbox for durability
- Directed air exhaust
- Gear head rotates at 90° intervals for added versatility
- Flat metal gear head for excellent visibility of work piece
- Protected air inlets
- Spindle lock



Article No. 0391 8000 8



### WS 9 - 115 4.5" Angle Grinder

- Powerful 900 watt motor with outstanding performance
- Machined metal gears for best durability
- Flat metal gear head for excellent visibility
- Cooling slots on the side & back to prevent overheating
- AVS side handle for low vibrations and less strain on user
- Burst resistant keyless safety guard for guard adjustment



Article No. 4935419380



### WS 11 - 115 4.5" Angle Grinder

- Powerful 1100 watt motor with outstanding performance
- Machined metal gears for best durability
- Flat metal gear head for excellent visibility
- Cooling slots on the side and back to prevent overheating
- AVS side handle for low vibrations and less strain on user
- Burst resistant keyless safety guard for guard adjustment



Article No. 4935419400



# ELECTRICAL POWER TOOLS



## AEG ELECTRICAL POWER TOOLS

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### WS 2200 - 180 7" Angle Grinder

- Superior performance with the 2200 watt motor
- Flat metal gear head for excellent visibility
- Compact, ergonomic design with softgrip on main handle for more comfortable work
- External brush doors for fast brush replacement



Article No. 493 542 8506



### WS 2200 - 230 9" Angle Grinder

- Superior performance with the 2200 watt motor
- Flat metal gear head for excellent visibility
- Compact, ergonomic design with softgrip on main handle for more comfortable work
- External brush doors for fast brush replacement



Article No. 493 542 8510



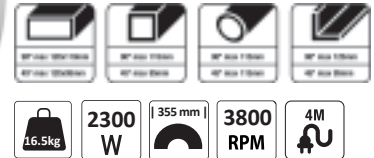
## METAL CHOPSAW

### SMT 355

- Powerful 2300 watt motor
- 0° - 45° mitre capacity with quick release mitre clamp
- Spindle lock for easy wheel and accessory changing
- Deflector protects the user from sparks
- Oversize guard for added safety
- On board wrench storage
- Rubber feet for greater stability



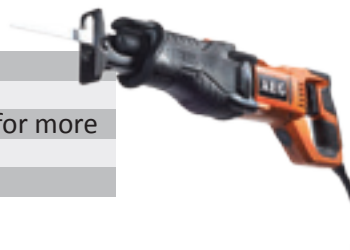
Article No. 0892 1012 5



## RECIPROCATING SAW

### US 900 XE

- Powerful 900 watt motor
- FIXTEC for fast and easy blade change
- Pendulum function with 19 mm stroke length, for more powerful and faster cutting progress
- Ergonomic soft-grip handle design for comfort



Article No. 4935419610



## JIGSAW

### STEP 70

- Powerful 500 watt motor
- 4-Stage pendulum adjustment for best cutting
- Electronics with variable preselection of stroke rate, for perfect work in different materials



Article No. 4935 4129 00





# ELECTRICAL POWER TOOLS



AEG ELECTRICAL POWER TOOLS

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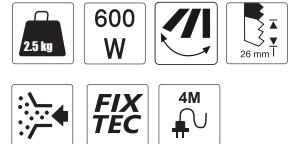
## TOPHANDLE JIGSAW

### STEP 1200 BX

- Powerful 600 watt motor
- Patented FIXTEC system for changing saw blades in sec.
- 4-Stage pendulum adjustment
- Variable speed electronics for control
- AVS anti-vibration mechanism for user comfort
- Ergonomic top handle design with integrated soft-grip
- Sawdust blower keeps cutting line clear for accuracy
- Base plate can be moved backwards for sawing on edges



Article No. 4935 4128 19



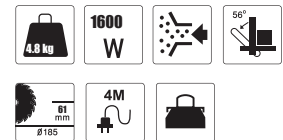
## CIRCULAR SAW

### KS 66 C

- Powerful 1600 watt motor for heavy duty applications
- 56° bevel capacity with 45° positive stop
- Magnesium guards offer lightweight high strength
- Full length kerf indicator for accurate cutting
- Externally accessible brushes for easy replacement
- Integrated dust blower keeps cut line clear for accuracy
- Soft-grip handle for comfort



Article No.0302 2600 6



### KS 66-2

- Powerful 1600 watt motor for heavy duty applications
- 56° bevel capacity with 45° positive stop
- Magnesium guards offers lightweight high strength
- Full length kerf indicator for accurate cutting
- Externally accessible brushes for easy replacement
- Integrated dust blower keeps cut line clear for accuracy
- Soft-grip handle for comfort



Article No.4935446675



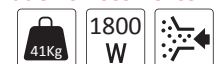
## TABLESAW

### TS 250 K

- Powerful 1800 watt motor
- 4800 rpm for effortless accurate cutting
- 90 mm cutting depth (62 mm at 45°)
- Dual clamping parallel fence for high stability & accuracy
- Overload protection ensures durability
- Soft start



Article No. 4935419265



## AIR BLOWER

### GM 600 E

- Variable speed control switch to adjust the airflow as per the cleaning job.
- High quality vacuum bag for effective dust collection.
- Lock on Switch for continuous work.



Article No. 4935 4281 50



# ELECTRICAL POWER TOOLS



AEG ELECTRICAL POWER TOOLS

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## HEAT GUN

### HG 560 D

- 1500 watt air blower with two settings ( 300°/ 560° )
- Robust fan for continuous operations
- Non-slip standing surface for stationary use
- Extremely light weight product - 0.85 kg



Article No. 4935441015



### PT 560

- 1500 watt air blower with two settings ( 300°/ 560° )
- Robust fan for continuous operations
- Non-slip standing surface for stationary use



Article No. 3924 6004



**AEG POWERTOOLS** promises to draw upon its heritage and deliver exciting, high performance, innovative working solutions for the professional tradesmen of today and the future.



# GRINDING / CUTTING BLACK DISCS



PREMIUMFLEX

www.unipro-ikk.com

## STEEL CUTTING DISCS

A 30/36V-BF			
D x b x a	F 41	f 42	
100 x 3.0 x 16.0	T 011 010	T 011 011	50
115 x 3.0 x 22.23	T 011 012	T 011 013	50
125 x 3.0 x 22.23	T 011 014	T 011 015	50
150 x 3.0 x 22.23	T 011 016	T 011 017	50
180 x 3.0 x 22.23	T 011 018	T 011 019	50
230 x 3.0 x 22.23	T 011 020	T 011 021	50



## STONE CUTTING DISCS

C 30 S-BF			
D x b x a	F 41	f 42	
100 x 3.0 x 16.0	T 000 637	T 000 639	25
115 x 3.0 x 22.23	T 000 661	T 000 664	25
125 x 3.0 x 22.23	T 000 687	T 000 689	25
150 x 3.0 x 22.23	T 000 708	T 000 710	25
180 x 3.0 x 22.23	T 000 730	T 000 734	25
230 x 3.0 x 22.23	T 000 752	T 000 756	25
230 x 3.4 x 22.23		T 001 034	25





# GRINDING / CUTTING BLACK DISCS

PREMIUMFLEX



[www.unipro-ikk.com](http://www.unipro-ikk.com)

## STEEL GRINDING DISCS

A 24 / 30 S-BF		
D x b x a	F 27 	
100 x 6.0 x 16.0	S 000 642	10
115 x 6.0 x 22.23	S 000 667	10
125 x 6.0 x 22.23	S 000 692	10
150 x 6.0 x 22.23	S 000 712	10
180 x 6.5 x 22.23	S 000 737	10
230 x 6.5 x 22.23	S 000 762	10



## STONE GRINDING DISCS

C 24 N-BF		
D x b x a	F 27 	
100 x 6.0 x 16.0	S 001 614	10
115 x 6.0 x 22.23	S 001 617	10
125 x 6.0 x 22.23	S 001 618	10
150 x 6.0 x 22.23	S 001 622	10
180 x 6.8 x 22.23	S 001 623	10
180 x 8.0 x 22.23	S 001 624	10
230 x 6.8 x 22.23	S 001 625	10
230 x 8.0 x 22.23	S 001 688	10



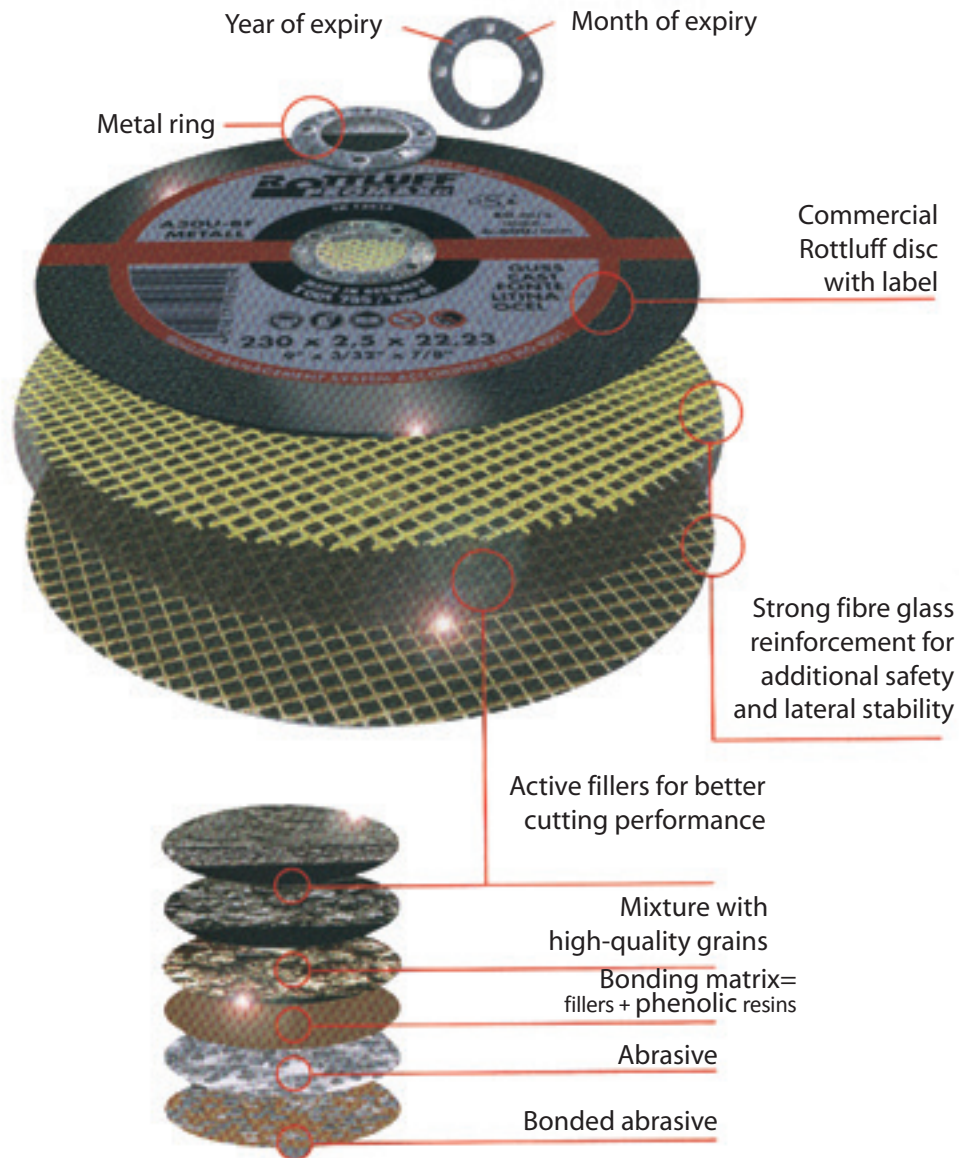
# GRINDING / CUTTING BLACK DISCS



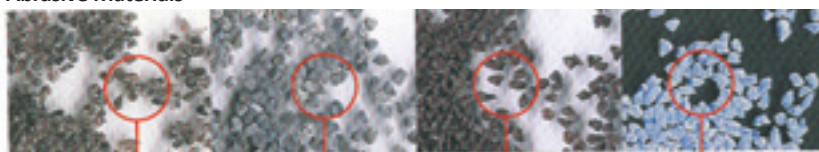
PREMIUMFLEX

www.unipro-ikk.com

## STRUCTURE AND COMPONENTS OF ROTLUFF WHEELS



### Abrasive Materials



Semi-friable corundum    Zirconia alumina    Vitriified coated roasted corundum

3M Cubitron®

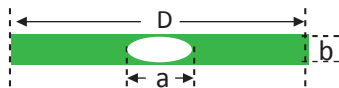
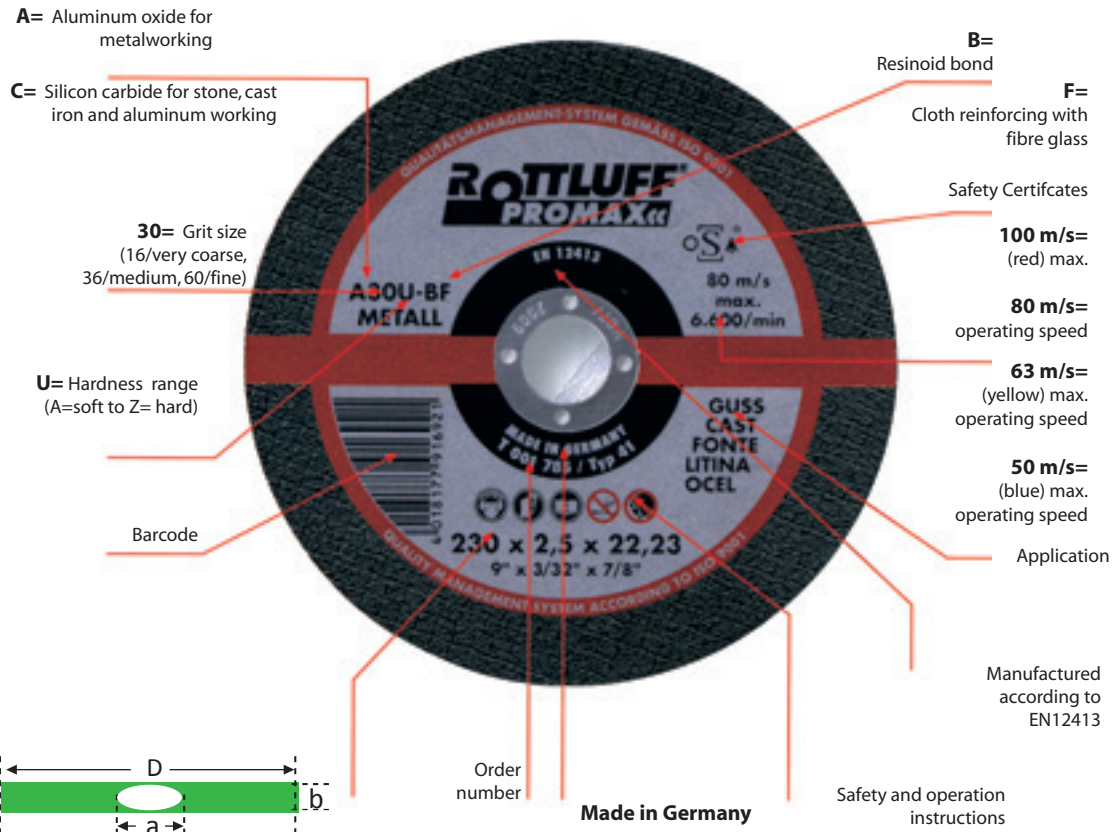
# GRINDING / CUTTING BLACK DISCS



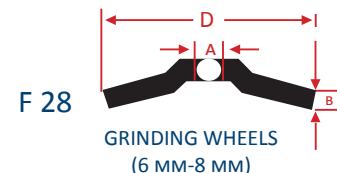
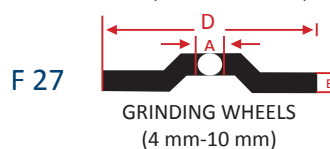
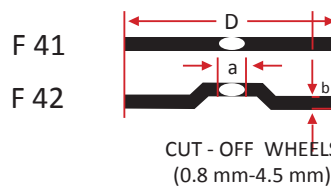
PREMIUMFLEX

www.unipro-ikk.com

## EXPLANATIONS OF THE INSTRUCTIONS ON ROTTLUFF CUTTING AND GRINDING DISCS



180 x 2.5 x 22.23 = Ø D X b x a  
 7" x 3/32" x 7/8" = Ø D X b x a  
 Diameter x thickness x bore size



Our product data and information sheets give you a more detailed knowledge about wheel configurations, shapes, dimensions, applications and specifications



# DIAMOND CUTTING BLADES

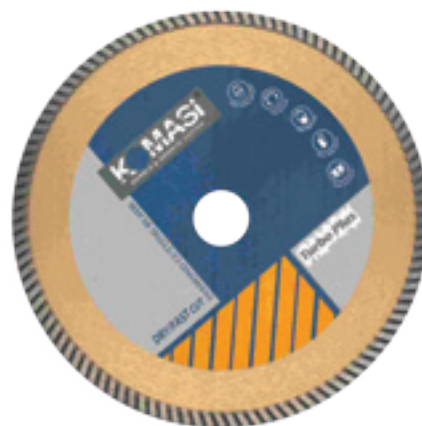
KOMASI'S

[www.unipro-ikk.com](http://www.unipro-ikk.com)

**Turbo Plus** series combine the advantages of both continuous rim and segmented blades for the dry cutting of bricks, blocks, tiles, concrete and other masonry materials. It is recommended for work that requires fast free cutting of marble and granite and hard materials at a competitive cost.

## STANDARD SPECIFICATIONS

CODE	DIAMETER		SEGMENT WIDTH(T)	SEGMENT HEIGHT(X)
	mm	Inch		
AWC-4	105	4"	2.4mm (.095")	7 mm
AWC-4.5	115	4.5"	2.4mm (.095")	7 mm
AWC-5	125	5"	2.4mm (.095")	7 mm
AWC-6	150	6"	2.4mm (.095")	7 mm
AWC-7	180	7"	2.4mm (.095")	7 mm
AWC-9	230	9"	2.4mm (.095")	8 mm
AWC-9T	230	9"	2.8mm (.110")	8 mm



**Turbo Max** series cut fast with less chipping, better cooling, excellent dust removal and improved operation safety. It is recommended for work that requires fast, durable cutting of concrete and granite at a low cost.

## STANDARD SPECIFICATIONS

Code	Diameter		segment Width(T)	Segment Height(X)
	mm	Inch		
AWC-4	105	4"	2.4mm (.095")	7 mm
AWC-4.5	115	4.5"	2.4mm (.095")	8 mm
AWC-5	125	5"	2.4mm (.095")	8 mm
AWC-7	180	7"	2.4mm (.095")	8 mm
AWC-8	200	8"	2.4mm (.095")	8 mm
AWC-9	230	9"	2.4mm (.095")	8.5 mm
AWC-9T	230	9"	2.4mm (.110")	8.5 mm
AWC-10	250	10"	2.8mm (.095")	8.5 mm



# SEMI-FLEX ABRASIVE DISCS

## SEMI-FLEX ZEC

[www.unipro-ikk.com](http://www.unipro-ikk.com)

ZEC Semiflex is manufactured with a fiber support of 2.0 mm in thickness and multiple layers of first-rate abrasive. Intended to be mounted on hand grinding machines with a proper backing pad, it acquires its flexibility after a few minutes from beginning of working. Therefore the flexibility shall never be tested by hand in a cold condition. The flexibility allows to deaden vibrations that normally occur with the use of grinding wheels, reduces and facilitates the operator's labour while providing an excellent performance. To achieve the best efficiency of the disc, just exert a slight pressure during working. Perforated holes on the surface prevent the work piece from overheating while, at the same time, allow the ejection of scraps. ZEC Semiflex complies with the safety requirements according to the European Standard EN 13743.



### MAIN FEATURES

- 2.0mm fiber heavy duty backing
- Long Lasting
- Lightweight
- Very aggressive
- Use with back up pad

### TECHNICAL DATA

DIAMETERS mm.	178x22 127x22 115x22 100x16
DIAMETERS inches.	7 x 7/8 5 x 7/8 4½ x 7/8 4 x 5/8
MAX SPEED rpm	8.500 12.000 13.300 15.300
MAX PERIPHERIC SPEED	80 met./sec.o
ABRASIVE	Silicon Carbide / Aluminum Oxide
GRITS Silicon Carbide	12-16-24-36-50-60-80-100-120-150-180-220-280-320
GRITS Aluminum Oxide	16-24-36-50-60-80-100-120-150-180-220
SHAPE	DOMED / FLAT



# CONCRETE CORING

**BBTECTOOLS**

## B+BTEC

[www.unipro-ikk.com](http://www.unipro-ikk.com)

B+BTEC introduce a complete new line of drilling systems, anchoring and saws. These machines are entirely designed, manufactured and assembled in our production facilities in the Netherlands and packed with new quality features.

The B+BTEC R&D Division has developed a wide range of Bonds (the metal in which the diamond crystals are sintered) that are engineered for optimal cutting performance and blade life in Concrete, Brick, Masonry and Porotherm Brick & Blocks and are specially designed for today's construction materials that, due to their configuration or size, are difficult or impossible to cut using traditional methods.

[www.bbteertools.com](http://www.bbteertools.com)

## DIAMOND CORE DRILLING SYSTEMS



1. Powerful 2.000W Drill Motor with PULSE™ Electronic Motor Protection
2. 360° Auxiliary Handle
3. Full Range of HiSpeed Diamond Core Bits
4. Optional Dry Drilling Kit allows for Continued Alternating Dry or Wet Drilling
5. Mid- or Back Grip Model. Back Grip best suited for Vertical Holes. Mid Grip Model for Horizontal Holes.
6. LED Motor Overload Protection System
7. Water Levels aid the operator in keeping the machine level
8. 3-Speed Gearing for optimal drilling Performance at any Diameter.
9. Water Valve facing backwards to prevent damage
10. Professional Grade Aluminum Motor Housing

**QUALITY FEATURES**

# CONCRETE CORING

**B+BTEC**

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## KARAT® 130-BG



Code	Bit Range	Specifications
Karat® 130-BG	Ø8 - 132 mm	Wet & Dry Drilling Motor: 2.000W 3 Speed Gearing

## KARAT®130-MG



Code	Bit Range	Specifications
Karat®130-MG	Ø8 - 132 mm	Wet & Dry Drilling Motor: 2.000W 3 Speed Gearing

## KARAT®164



Code	Bit Range	Specifications
Karat®164	Ø10 - 164 mm	Wet & Dry Drilling Motor: 2.000W 3 Speed Gearing

## KARAT®300



Code	Bit Range	Specifications
Karat®300	Ø25 - 300 mm	Wet & Dry Drilling Motor: 2.400W 3 Speed Gearing

## KARAT®MODULES



Code	Specifications	
Karat®Modules	Configure your own Karat Core Drilling Machine	

# CONCRETE CORING

**BBTEC**TOOLS

B+BTEC

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## CONCRETE CORING HANDHELD DRILL

### KARAT® 130-BG

KARAT® 130-BG Professional Diamond Hand Drilling Unit  
for Wet and Dry\* use

\* = Dry drilling kit and Drill stand are optional.  
- Powerful 2.000W Motor.



- One machine for Wet or Dry\* Coring.
- LED motor-overload Indication.
- PULSE™ Electronic Motor Protection System
- Aluminum Motor Housing
- Digital Read-Out of Machine Load and Operating Hours (optional)
- Aluminum Back Grip
- Can be used on Drill Stand\*.
- Weight 7.5 kg.

**Supplied with:**

- Safety Clutch
- PRCD Switch
- Carrying Case
- Tool Set
- Operating Manual



### KARAT® 130-MG

KARAT® 130-MG Professional Diamond Hand Drilling Unit  
for Wet and Dry\* use

\* = Dry drilling kit and Drill stand are optional.



- Powerful 2.000W Motor.
- PULSE™ Electronic Motor Protection System
- One machine for Wet or Dry\* Coring.
- LED motor-overload Indication.
- Aluminum Motor Housing
- Digital Read-Out of Machine Load and Operating Hours (optional)
- Mid-Grip
- Can be used on Drill Stand\*.
- Weight 7.5 kg.

**Supplied with:**

- Safety Clutch
- PRCD Switch
- Carrying Case
- Tool Set
- Operating Manual



# CONCRETE CORING

B+BTEC

www.unipro-ikk.com

## KARAT® 130

### Dry Drilling Kit:

Transform the Karat 130-BG or 130-MG into a Dry Drilling Unit.

Allows for Continued, Alternating Wet and Dry use.

Threading: 1 1/4"

Qty./1 Part Nr.: 2.000.134



### Hand Grip:

Additional Coated Aluminum Back Grip. For Karat 130-BG only.

For greater operator comfort and precision when hand drilling vertical holes.

Qty./1 Part Nr.: 2.000.132



**Drill Stand:** equipped with Dovetail Guide-Way, Slide, Centering Device and Drilling Depth Indication, Quick Snap Reversible Downfeed Spindle (Left - Right).

For Karat 130-BG and 130-MG

Part Nr.: 2.000.131

### Vacuum Kit:

For the fastening of the drill stand using a vacuum pump. Incl. vacuum rubber for the drill stand

Qty./1 Part Nr.: 2.164.009

**Vacuum Pump:** for the fastening of the drill stand.

Requires

the optional Vacuum Kit.

Qty./1 Part Nr.: 2.100.002



## QUALITY FEATURES

1. Protective Brackets
2. Powerful Drill Motors with PULSE™ Electronic Motor Protection.
3. Full Range of HiSpeed Diamond Core Bits.
4. Dovetail Guide-Way.
5. Quick Release Slide (Karat 300 only).
6. Water Levels for Easy Machine Set-Up.
7. Reversible Downfeed Spindle.
8. Engraved Drilling Depth Indication.
9. Anchoring Assembly/Centerpen
10. Column Tilttable Angle Drilling up to 45°
11. Transportation Wheels
12. Waterflow Indication
13. Mounting option for Jack Screw
14. LED Overload Protection System
15. 3-Speed Gearing for Optimal Drilling Performance at any Diameter
16. Water Valve
17. Centering Device



# CONCRETE CORING

**BBTECTOOLS**

**B+BTEC**

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## KARAT® 164

**Karat® 164 Professional Diamond Core Drilling Rig:**

- Powerful 2.000W Motor.
- With Centering Device and Drilling Depth Indication.
- LED Overload Protection System.
- Digital Read-Out of Machine Load and Operating Hours (optional)
- PULSE™ Electronic Motor Protection System
- For Anchor and Conduit holes up to Ø164 mm.
- Weight 22.5 kg.

**Supplied with:**

- Safety Clutch
- PRCD (GFCI) Switch
- Waterflow Indication
- Dovetail Guide-Way
- Anchoring Assembly/Centerpen
- Tool Set
- Operating Manual

**Technical Data:**

Motor:	---	3-Speed/230V/50-60Hz/2000W
Bit Range:	[mm]	Ø 10 - 164
Drilling Depth:	[mm]	standard 400
Spindle Threading:		½" - 1 ¼"
Column Tilttable:	-- up to 45°	
Weight:	[kg]	22.5 kg.
Dimensions:	[mm]	500 x 230 x 770
(L x W x H)		



## KARAT® 300

**Karat® 300 Professional Diamond Core Drilling Rig:**

- Powerful 2.400W Motor.
- With Centering Device and Drilling Depth Indication.
- LED Overload Protection System.
- Digital Read-Out of Machine Load and Operating Hours (optional)
- PULSE™ Electronic Motor Protection System.
- For Conduit holes up to Ø300 mm.
- Weight 30 kg.

**Supplied with:**

- Safety Clutch
- PRCD (GFCI) Switch
- Waterflow Indication
- Dovetail Guide-Way
- Anchoring Assembly/Centerpen
- Tool Set
- Operating Manual

**Technical Data:**

Motor:	3-Speed/230V/50-60Hz/2400W
Bit Range max.:	Ø 25 - 300 mm
Bit Range optimal:	Ø 25 - 250 mm
Drilling Depth:	standard 400 mm
Spindle Threading:	½" (adapter) - 1 ¼"
Column Tilttable:	up to 45°
Weight:	30 kg.
Dimensions (L x W x H):	530 x 275 x 775 mm

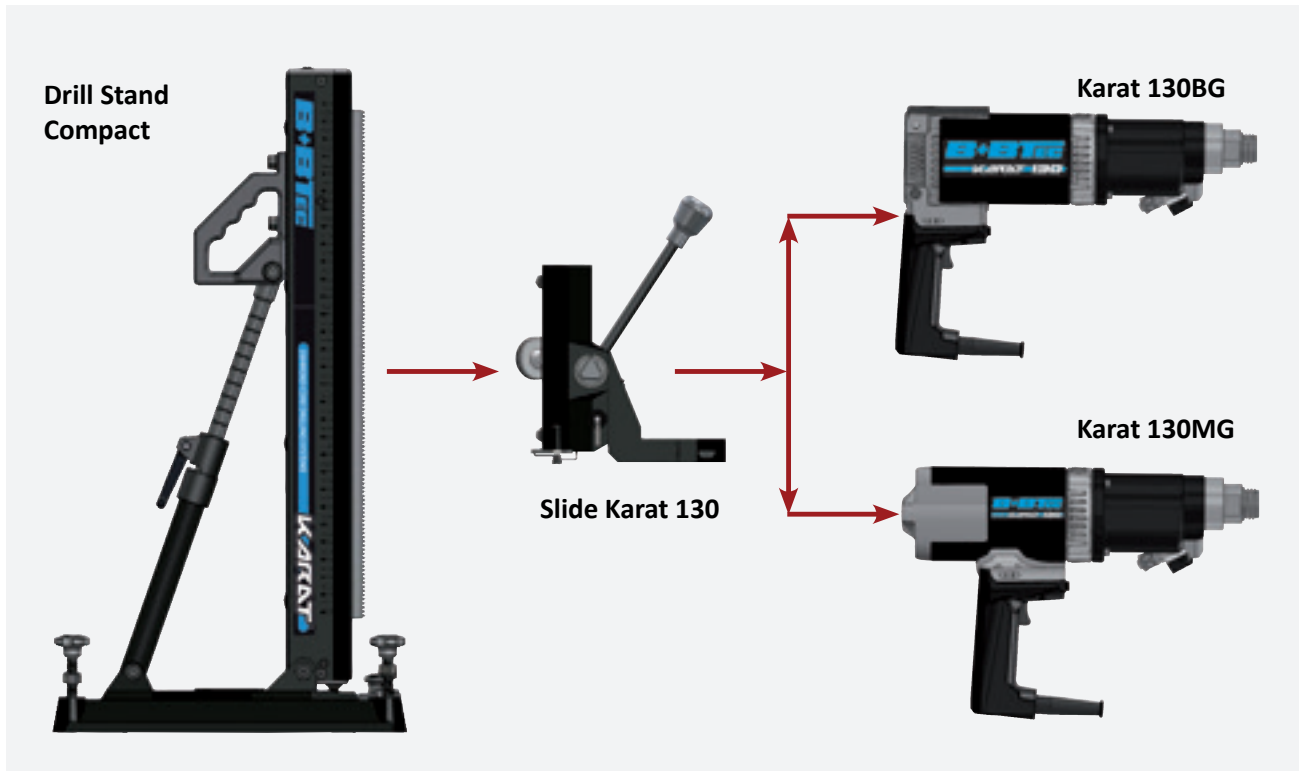


# CONCRETE CORING

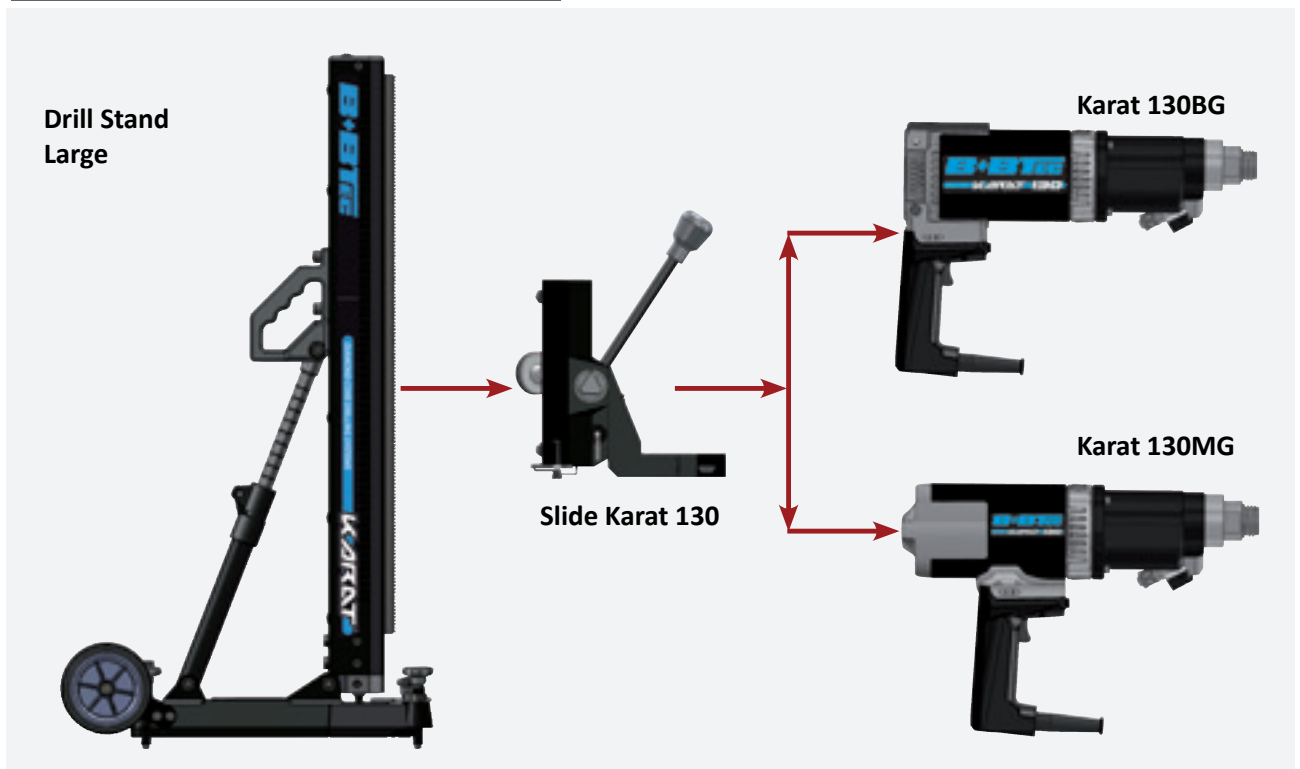
B+BTEC

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## KARAT 130 + SLIDE + DRILL STAND COMPACT



## KARAT 130 + SLIDE + DRILL STAND LARGE



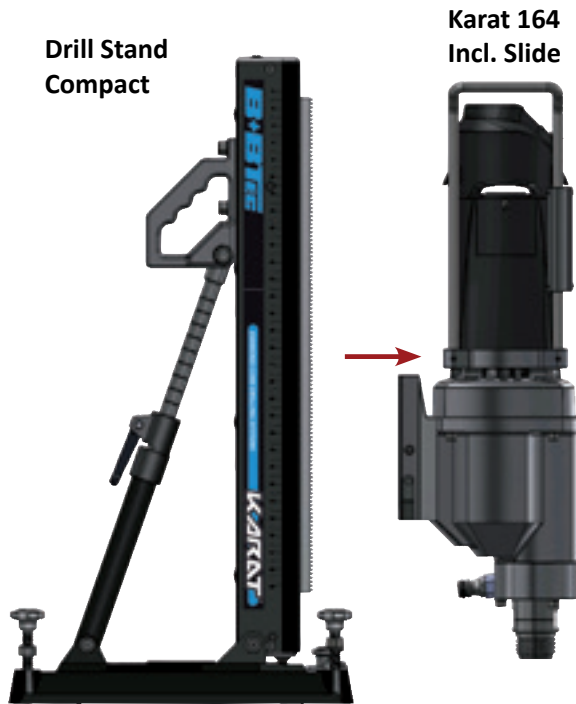


# CONCRETE CORING

B+BTEC

[www.unipro-ikk.com](http://www.unipro-ikk.com)

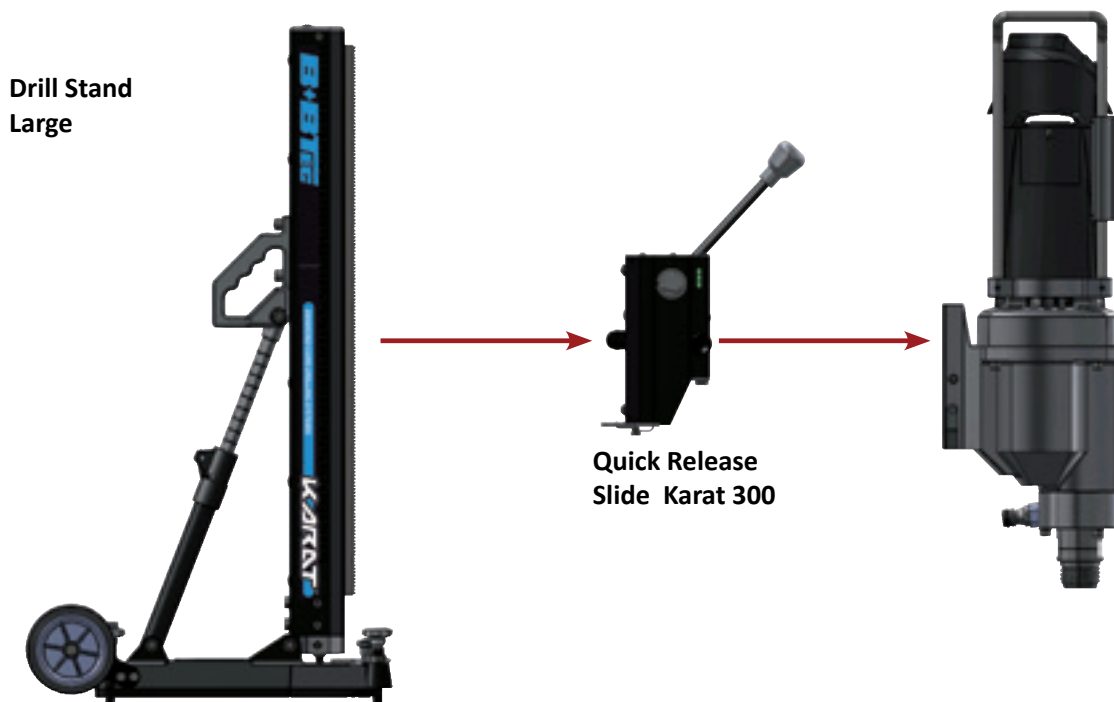
## KARAT 164 + DRILL STAND COMPACT



## KARAT 164 + DRILL STAND LARGE



## KARAT 300 + QUICK RELEASE SLIDE + DRILL STAND LARGE



# CONCRETE CORING

**BBTECTOOLS**

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## CONCRETE CORING

### KARAT MODULES

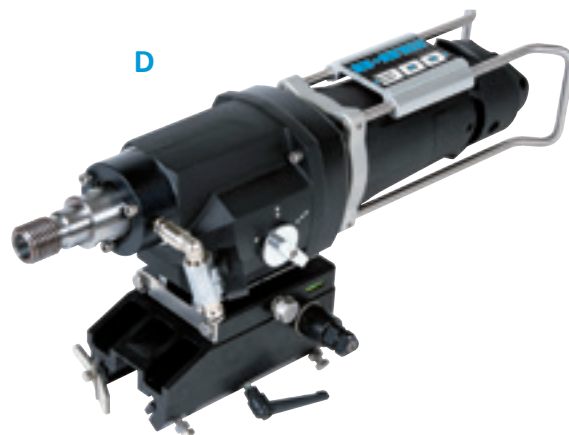
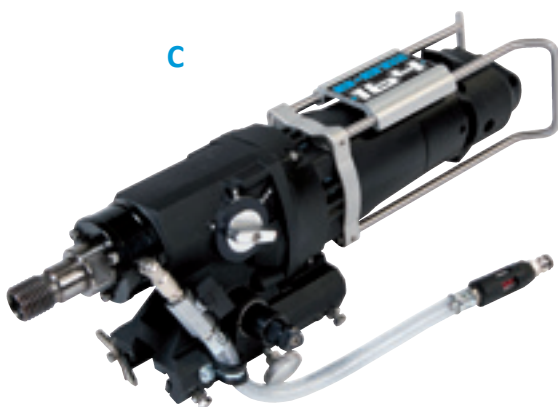
#### DRILL MOTORS & SLIDES



**A** Karat 130BG: Powerful 2.000W Handheld Diamond Core Drilling Unit. Aluminum Motor Housing. 3-Speed Gearing.

**B** Karat 130MG: Powerful 2.000W Handheld Diamond Core Drilling Unit. Aluminum Motor Housing. 3-Speed Gearing.

#### DRILL MOTORS & SLIDES



**C** Karat 164: Motor/Gearbox/Slide, complete. 2.000W for Bit Range  $\varnothing$ 10 -  $\varnothing$ 164 mm.

**D** Karat 300: Powerful 2.400 W Drill Motor complete with 3-Speed Gearbox and Quick Release Slide. Supplied with Tool Set and Adapter for 1/2" Bits. Bit Range  $\varnothing$ 25 -  $\varnothing$ 300 mm.

# CONCRETE CORING

**BBTEC**TOOLS

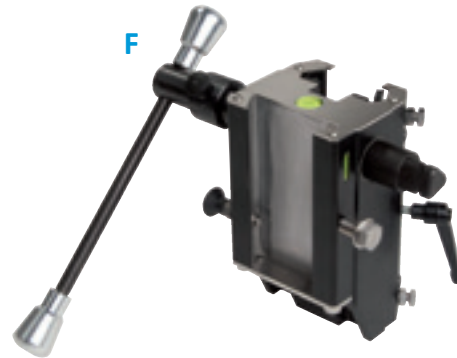
**B+BTEC**

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## DRILL MOTORS & SLIDES



**E**



**F**

**E** Slide Karat 130: For Karat 130BG and Karat 130MG Drill Motors. Fits on Drill Stand Compact and Large,

**F** Quick Release Slide Karat 300. For Karat 300 Drill Motors. Fits Drill Stand Large.

## DRILL MOTORS & SLIDES



**H**



**G**



**J**



**I**

**G** Drill Stand Large with Wheels: Equipped with Dovetail Guide-Way, Centering Device, Drilling Depth Indication and Transportation Wheels. Supplied with Anchoring Assembly.  
Weight: 13.9 kg. For Karat 130, 164 or 300 Drill Motors.

**H** Drill Stand Large with Wheels, stroke 1.000 mm Same as above but with longer column.  
Weight: 16.5 kg. For Karat 164 or Karat 300 Drill Motors.

**I** Drill Stand Compact: Equipped with Dovetail Guide-Way, Centering Device, Drilling Depth Indication, Supplied with Anchoring Assembly.  
Weight: 9.5 kg. For Karat 130 (requires slide 2.000.138) or Karat 164 Drill Motors.

**J** Drill Stand Compact with Slide for Karat 130: Equipped with Dovetail Guide-Way, Slide, Centering Device, Drilling Depth Indication, Quick-Snap Reversible Downfeed Spindle (Left - Right). Supplied with Anchoring Assembly.  
Weight: 10.3 kg . For Karat 130 Drill Motors

# STAINLESS STEEL CUTTING & DRILLING EQUIPMENT



## DIAMOND 3

[www.unipro-ikk.com](http://www.unipro-ikk.com)

Diamond3® is the premier manufacturer of Professional Equipment, Tools & Accessories for Tile, Stone, Sanitary Ware, Masonry, Concrete & Brick. Our product line includes: Stainless Steel Cutting Equipment, Drilling & Grinding Equipment, Specialty Diamond Blades, Diamond Drill (Core) Bits and Grinding Wheels.  
[www.diamond3tools.com](http://www.diamond3tools.com)



### UNIQUE STAINLESS STEEL CUTTING & DRILLING EQUIPMENT



# STAINLESS STEEL CUTTING & DRILLING EQUIPMENT

\*\*\*PROFESSIONAL  
**Diamond3**<sup>®</sup>

DIAMOND 3

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## Diamond3<sup>®</sup> 50

DT-1050-C-0010050

PROFESSIONAL STAINLESS STEEL MANUAL TILE CUTTER



Supplied complete with:

- Diamond3<sup>®</sup> Scoring Wheel Premium Ø 10 mm (Part Nr. 010.010)
- One Hand Scoring & Breaking System
- Tile Stop & Angular Measuring Device
- 2 Tile Supports
- Carrying Case
- Operating Manual
- Cuts 50 cm Tile
- Diagonal 35 cm
- Breaking Power: 1.0 kg
- Weight: 7 kg

## Diamond3<sup>®</sup> 75

DT-1090-C-0010075

PROFESSIONAL STAINLESS STEEL MANUAL TILE CUTTER



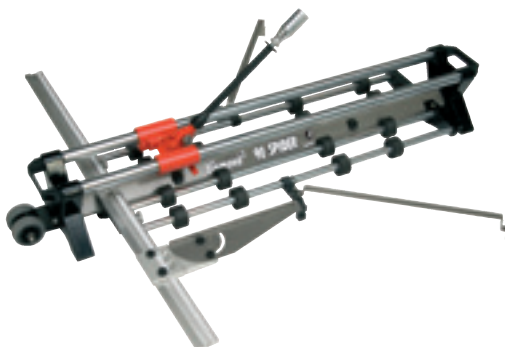
Supplied complete with:

- Diamond3<sup>®</sup> Scoring Wheel Premium Ø 10 mm (Part Nr. 010.010)
- One Hand Scoring & Breaking System
- Tile Stop & Angular Measuring Device
- 2 Tile Supports
- Carrying Case
- Operating Manual
- Cuts 75 cm Tile
- Diagonal 53 cm
- Breaking Power: 1.3 kg
- Weight: 13 kg

## Diamond3<sup>®</sup> 90 SPIDER

DT-1150-C-0010090

PROFESSIONAL STAINLESS STEEL MANUAL TILE CUTTER



- Titanium Scoring Wheel Ø 10 mm
- One Hand Scoring and Breaking System
- Rulers and 2 Tile Stops for repetitive cuts at any angle
- Roller System
- 2 integrated Tile Supports
- Wheels and Handles
- Carrying Case
- Operating Manual
- Cuts 90 cm Tile
- Diagonal 60 cm
- Breaking Power: 2.0 kg
- Weight: 23 kg



# STAINLESS STEEL CUTTING & DRILLING EQUIPMENT



## DIAMOND 3

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### PREMIUM 6 mm

DT-5330-C-0010006

SCORING WHEELS PREMIUM



Premium Quality Scoring Wheel for wall tile. For ceramic and porcelain tiles.

For the use on Diamond3 or other brand manual tile cutters.

### PREMIUM 10 mm

DT-5350-C-0010010

SCORING WHEELS PREMIUM



Premium Quality Scoring Wheel for floor tile. For ceramic and porcelain tiles.

For the use on Diamond3 or other brand manual tile cutters.

### PREMIUM 18 mm

DT-5390-C-0010018

SCORING WHEELS PREMIUM



Premium Quality Scoring Wheel for hard floor Tile. For ceramic and porcelain tiles.

For the use on Diamond3 or other brand manual tile cutters.

### DIAMOND3 CUP WHEEL GRINDING

DT-6070-C-0020115

DIAMOND CUP WHEELS



**RAZOR TURBO**  
Premium Quality Turbo Diamond Blade with continuous Rim (CR) for dry use. With Core Reinforcement and Adapter M14.





# STAINLESS STEEL CUTTING & DRILLING EQUIPMENT



DIAMOND 3

www.unipro-ikk.com

## WET DIAMOND, TILE BIT

DT-5330-C-0010006

### PROFESSIONAL DIAMOND TILE DRILL



PORCELAIN, GLAZED PORCELAIN,  
GRANITE, MARBLE, GLASS,  
SANITARY WARE, CERAMIC TILE, ETC

0402006	Diamond Tile Bit Ø 6
0402008	Diamond Tile Bit Ø 8
0402010	Diamond Tile Bit Ø 10
0402020	Diamond Tile Bit Ø 20
0402035	Diamond Tile Bit Ø 35
0402040	Diamond Tile Bit Ø 40
0402051	Diamond Tile Bit Ø 51
0402068	Diamond Tile Bit Ø 68

Premium Quality Diamond Tile Bits for wet use on Diamond3 FB750W and FB1200W tile drills.

Diamond Height 10 mm

Diamond Tile Bits for wet use on FB750W tile drilling machine

## Diamond3® FB750W

### Professional Diamond Tile Drill

#### PROFESSIONAL DIAMOND TILE DRILL



Powerful 750W Motor.  
Very Fast and Precise.  
Bitlife over 300 holes.  
Bit Range: Ø 4 mm - Ø 68 mm.  
Weight: 2,6 kg.  
Supplied with:  
PRCD (GFCI) Switch  
Water Tank  
Adjustable Drilling Guide  
Carrying Case

Bit Range:	[mm]	Ø 4 - 68
Power:	[W]	750
Motor:	[V/Hz]	230/50/60 Hz
No Load Speed:	[RPM]	3.000 - 10.000
Weight:	[kg]	2,6
Contents Water Tank:	[ltr]	5

# STAINLESS STEEL CUTTING & DRILLING EQUIPMENT



DIAMOND 3

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## Diamond3® FB1200W

### Professional Diamond Tile Drill

PROFESSIONAL DIAMOND TILE DRILL



Powerful 1.200W motor.  
Very Fast and Precise.  
Bitlife over 300 holes.  
Bit Range:  $\varnothing 10 - 125$  mm.  
Weight: 4,5 kg  
Supplied with:  
PRCD (GFCI) Switch  
Water Tank  
Adjustable Drilling Guide  
Adapter for Bits  $\varnothing 10$  mm - 68 mm  
Carrying Case



Bit Range:	[mm]	$\varnothing 10 - 125$
Power:	[W]	1.200
Motor:	[V/Hz]	230/50/60 Hz
No Load Speed:	[RPM]	3.000 - 10.000
Weight:	[kg]	4,5
Contents Water Tank:	[ltr]	5

## FB750W-F

### DIAMOND FACADE DRILLING UNIT

HOLES FOR THE INSTALLATION OF FACADE PANELS



Powerful 750W Motor.  
Very Fast and Precise.  
Bitlife over 300 holes.  
Bit Range:  $\varnothing 4$  mm -  $\varnothing 10$  mm.  
Weight: 6 kg.  
Supplied with:  
Machine Bracket  
Drilling Guide  
PRCD (GFCI) Switch  
Water Tank  
Carrying Case

Technical Data:		
Bit Range1):	[mm]	$\varnothing 4 - 10$
Drilling Depth2):	[mm]	40
Max. Facade:	[mm]	50
Panel Thickness		
Power:	[W]	750
Motor:	[V/Hz]	230/50/60
No Load Speed:	[RPM]	3.000 - 10.000
Weight:	[kg]	6
Contents Water Tank:	[ltr]	5

# STAINLESS STEEL CUTTING & DRILLING EQUIPMENT

\*\*\*PROFESSIONAL  
**Diamond<sup>3</sup>**

DIAMOND 3

[www.unipro-ikk.com](http://www.unipro-ikk.com)

**UDK 68**

## Universal Drilling Kit

FOR DIAMOND TILE BITS  $\varnothing 4 - \varnothing 68$  MM



Water injection head, suitable for any drilling machine with a 13 mm cylindrical chuck and variable speed control



Supplied with

- Water tank
- Adjustable drill guide with vacuum pad
- Allen wrench



# PROFESSIONAL HAND TOOLS & EQUIPMENT

# IRWIN

IRWIN

[www.irwin.com](http://www.irwin.com)

## IRWIN Innovation

IRWIN TOOLS manufactures and distributes professional grade hand tools and power tool accessories worldwide for trade professionals who demand superior performance and durability on the job. IRWIN TOOLS' brand portfolio features user-preferred category leaders such as IRWIN, Vise-Grip, Marathon, Quick-Grip, Speedbor, Strait-Line, Unibit, and Hanson.

Supported by a global network of world-class manufacturing facilities and bolstered by our partnerships with leading global retailers, IRWIN continuously sets the professional standard in each and every market segment in which we compete. IRWIN's process of innovation begins and ends with the trade professional. From product feedback and development to distribution and use in the field, Irwin dedicated itself to delivering quality tools that meet the stringent requirements of our toughest critics – professional tradesmen.

[www.irwin.com](http://www.irwin.com)





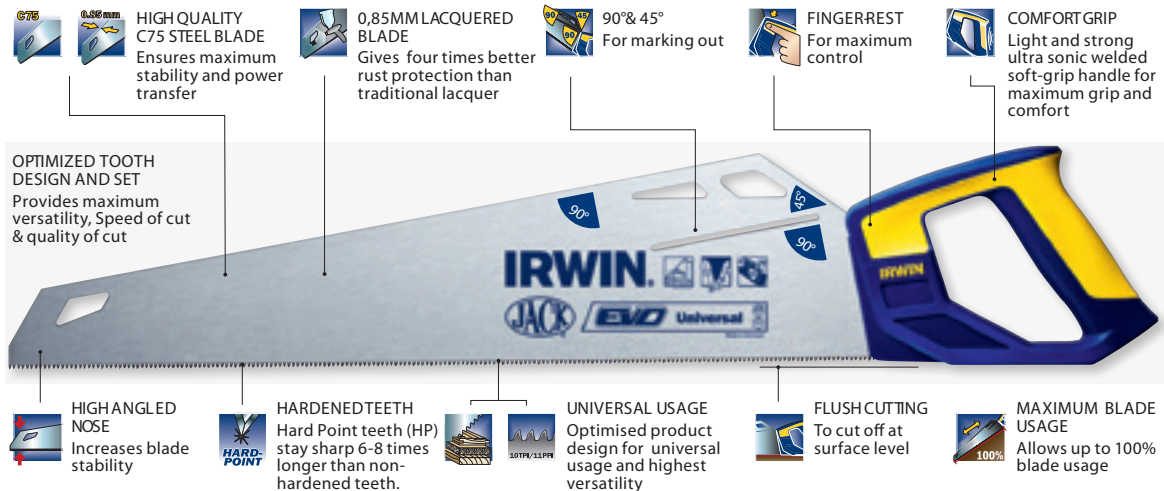
# PROFESSIONAL HAND TOOLS & EQUIPMENT

# IRWIN

IRWIN

www.irwin.com

## WOOD WORKING



The unique handle-to-blade relationship overcomes traditional design limitations and maximises how the user interacts with the hand saw

**Holistic product concept** which optimises the handle position (height and angle) to the tooth line with the optimal tooth design and superior ergonomics

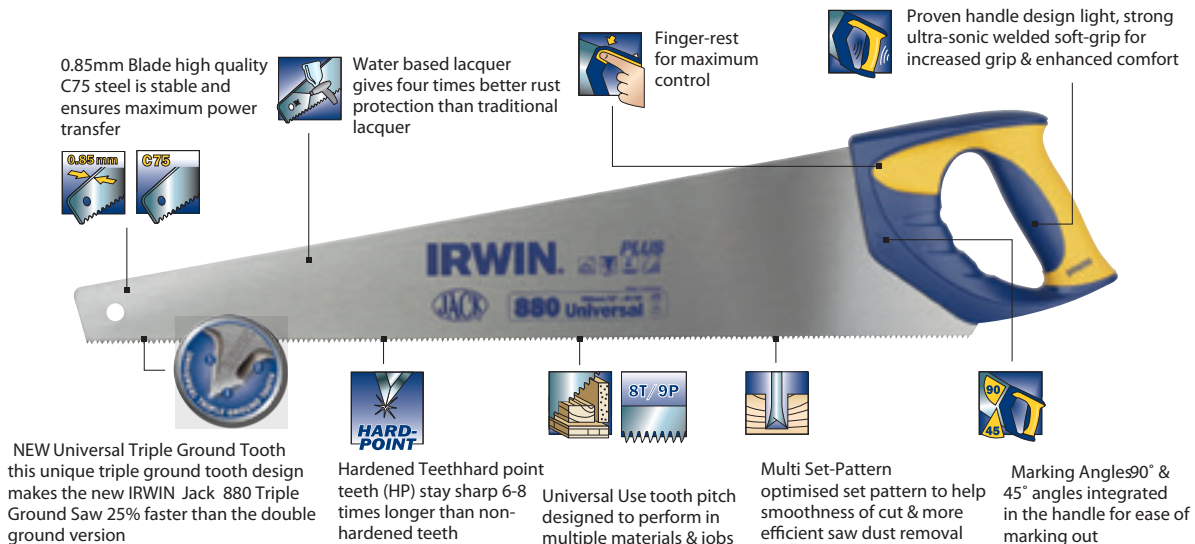
**One Saw** covers virtually all user needs

- **EVO is the most universal saw ever**

### EVO HANDSAW



## Universal 880 Triple Ground Saw



### 1 - Triple Ground

The new IRWIN® Universal Triple Ground Tooth builds on the characteristics of the compact and robust 880 Universal Double Ground Tooth

### 2 - Additional Ground Edge

The additional third ground edge improves cutting performance on both forward & backward strokes

### 3 - Increased Gullet Size

The increased gullet size facilitates more efficient saw dust removal

### 4 - Optimised Set Pattern

The optimised tooth set pattern delivers a smoother and more efficient cut whilst improving the ease of start

### UNIVERSAL 880 (PLUS RANGE)



# PROFESSIONAL HAND TOOLS & EQUIPMENT

# IRWIN

IRWIN

[www.irwin.com](http://www.irwin.com)

## UNIVERSAL 880 (STANDARD RANGE)



## BOWSAWS (STANDARD RANGE)



## BOWSAW (BASIC BLADES)



## CHISELS

IRWIN® woodworking tools embody a long tradition of craftsmanship and our chisel remains one of the finest on the market, recognised by professionals as setting the standard for all others. With many unique features developed through continuing innovation, our comprehensive range of tough, dependable chisels will tackle the most intricate or demanding job effortlessly.



### CHISEL MS500 (SINGLES)



### CHISEL MS500 (SETS)



M444 Blue-Chip Bevel Edge Chisels

**Blade hardened** up to the last 25mm for long working life

**Solid one-piece forged blade** ensures structural integrity

**Sharpened** ready for use

**Blade lacquered** for rust protection

**Large, strong tang** keeps the handle firmly attached

**Designed for use** with a mallet

**Impact-resistant** handle absorb occasional hammer blow

### CHISELS M444 (SINGLES)



### CHISELS M444 (SETS)



## PLANES

IRWIN® Record® bring decades of experience, well proven design and advanced production techniques to produce this fine range of woodworking planes.

### BENCH PLANES



### REBATE PLANE



### BLOCK PLANES



### SPOKESHAVES



### REPLACEMENT PLANE CUTTERS





# PROFESSIONAL HAND TOOLS & EQUIPMENT

# IRWIN

IRWIN

[www.irwin.com](http://www.irwin.com)

## CLAMPS

Heavy-Duty G-Clamps

IRWIN® Record® Heavy-Duty G-Clamps are the strongest you can buy. Recommended particularly for metalworking and fabrication work where a very high clamping force is demanded.

### HEAVY DUTY G-CLAMPS



### MEDIUM-DUTY G-CLAMPS



### GENERAL PURPOSE G-CLAMPS



### MECHANICS VICES



## KNIFE & BLADES

Utility Knives

A new collection of best-in-class knives developed from intensive research on the needs of professional users. This highly innovative range meets the high standards required by today's professional users – where safety, durability, convenience, and comfort are the most important factors.

### RETRACTABLE KNIFE



### BI METAL BLUE TRAPEZOID BLADES



### CARBON STEEL TRAPEZOID BLADES



### PROTOUTCH SNAP-OFF KNIFE



### PROFESSIONAL SNAP-OFF SCREW KNIFE



### SNAP-OFF KNIVES



### SNAP-OFF BI-METAL BLUE BLADES



### SNAP-OFF CARBON STEEL BLADES



# PROFESSIONAL HAND TOOLS & EQUIPMENT

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## MEASURING TOOLS

### XP TAPE RANGE



### PROFESSIONAL TAPE MEASURE RANGE



### STANDARD MEASURE RANGE TAPE



### CHALK REELS SETS



## PLIERS & WRENCHES

### CURVED JAW LOCKING PLIERS



### STRAIGHT LOCKING PLIERS



### CURVED JAW LOCKING PLIER WIRE CUTTER



### LONG NOSE LOCKING PLIERS WITH WIRE CUTTER



### LOCKING C-CLAMPS WITH REGULAR TIPS



### LOCKING C-CLAMPS - LARGE THROAT



### LOCKING WRENCHES



### LARGE JAW LOCKING PLIERS



### LOCKING C-CLAMPS WITH SWIVELPADS



### LOCKING PINCH-OFF TOOL



### LOCKING SHEET METAL TOOL



### LOCKING PANEL CLAMP



# PROFESSIONAL HAND TOOLS & EQUIPMENT

# IRWIN

IRWIN

[www.irwin.com](http://www.irwin.com)

LOCKING C-CLAMPS WITH  
REGULAR TIPS



LOCKING C-CLAMPS WITH  
SWEVELPADS



LOCKING C-CLAMPS - LARGE  
THROAT



LOCKING WRENCHES



LARGE JAW LOCING PLIERS



LOCKING PINCH-OFF TOOL



LOCKING SHEET METAL TOOL



LOCKING PANEL CLAMP



LOCKING WELDING CLAMP



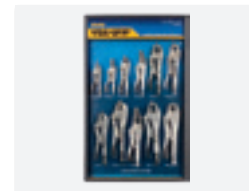
LOCKING CHAIN CLAMP



LOCKING PLIER SETS



LOCKING PLIERS DISPLAY



WATER PUMP PLIERS WITH PRO-  
TOUCH HANDLE



WATER PUMP PLIERS WITH  
THIN HANDLE



ADJUSTABLE WRENCHES

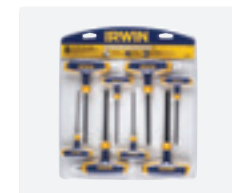


## HEX & TORX

"T" HANDLE HEX KEYS MM



"T" HANDLE HEX KEYS SET



HEX AND TORX KEY - FOLD UP  
SETS



HOLSTER HEX-TORX SET



# PROFESSIONAL HAND TOOLS & EQUIPMENT



IRWIN

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## METAL CUTTING

### Hacksaw Frames

The IRWIN® Hacksaw frames are built to meet the professional's demanding needs. The durable IRWIN® frames make cutting quick and easy.

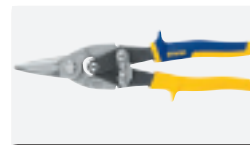
#### HACK SAW FRAMES



#### HACKSAW BLADE



#### AVIATION AND OFFSET SNIPS



## DRILLING

Material	Icon	Masonry	Granite	Cordless	Speed hammer Plus	Speed hammer Power	Speed hammer Max	Glass & Tile	Diamond	HSS Pro	HSS Cobalt	HSS TIN	Turbomax	Blue Groove 4X/6X	Blue Groove Power	Auger Bit
Rebar Reinforced Concrete					H	HHH	HH									
Concrete		HH	HH	H	HHH	HHH	HHH									
Limestone		HHH	HHH	HH	HH	HH	HH									
Concrete Blocks		HH	HHH	H	HHH	HHH	HHH									
Aerated Concrete		HH	HH	HHH	HH	HH	HH									
Brick		HHH	HH	HHH	HH	HH	H									
Roof Tile		HHH	HH	HHH	H	H	H									
Drywall		HH	HH	HHH	H	H	H							H	H	H
Marble		H	H	HHH	H	H	H	HHH								
Slate		HH	HH	HHH				HHH								
Granite		HH	HHH	H	HHH	HHH	HHH	HHH								
Eternit		H	H	HH	H	H										
Ceramic Tile		H	H	HHH	H	H		HHH	HHH							
Hard Floor Tile				HHH				HHH								
Porcelain				H				HHH	HHH							
PVC		H	H	HHH	H	H				HHH	HHH	HHH	HHH			
Reinforced Plastic				HHH						HHH	HHH	HHH	HHH			
Glass Fibre				HHH				H	HH	HHH	HHH	HHH	HHH			
Soft Wood				H						H		H	H	HHH	HHH	HHH
Hard Wood				H						H		H	H	HHH	HHH	HHH
Chipboard				H						H		H	H	HH	HH	HHH
Nail Embedded Wood															HHH	
Sheet Metal				H						HH	HHH	HHH	HHH			
Soft Steel				HH						HH	HH	HHH	HHH			
High Alloy Steel										H	HHH	HH	H			
Aluminium & Non-Ferrous Metal				H						H	HHH	HHH	HHH			
Stainless Steel											HHH	HH				

H = Good HH = Better HHH = Best

# PROFESSIONAL HAND TOOLS & EQUIPMENT

# IRWIN

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## DRILL BITS

**SPEEDHAMMER PLUS DRILL BITS**



**SPEED HAMMAER PLUS DRILL BITS 5 PICES BULK PACK**



**SPEED HAMMER PLUS DRILL BIT CASSETTES**



**SPEED HAMMER MAX DRILL BITS 2 CUTTING EDGES**



**SPEED HAMMER MAX DRILL BITS 4 CUTTING EDGES**



**SPEED HAMMER PLUS DEMOLITION CHISELS**



**SPEED HAMMER MAX DEMOLITION CHISELS**

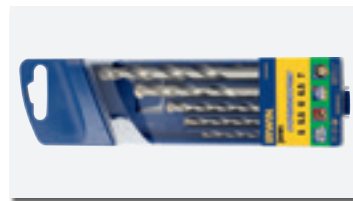


Masonry - Now 20% more life versus previous version

**MASONRY DRILL BITS**



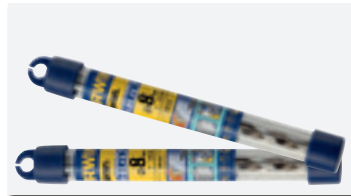
**MASONRY DRILL BIT CASSETTES**



**GRANITE DRILL BITS**



**HSS 8% COBALT DRILL BIT**



**BLUE GROOVE 6X WOOD BORING BIT**



**HSS PRO DRILL BITS**



**BLUE GROOVE 6X WOOD BORING BIT SETS**



**BLUE GROOVE 4X FLAT BITS SETS**



# PROFESSIONAL HAND TOOLS & EQUIPMENT

# IRWIN

IRWIN

[www.irwin.com](http://www.irwin.com)

## BLUE GROOVE 4X FLAT BITS DESCRIPTION Ø MM



## AUGER BITS



## INSERT BITS HOLDER

IRWIN® Insert Bits are engineered for use in hand-driving applications or with power tools when used with the IRWIN®

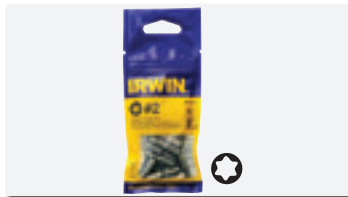
Insert Bit Holder.

IRWIN® Power Bits are specifically designed for the higher torque requirements of power tools. They are designed to provide more clearance between the power tool & the fastener.

## PHILLIPS BITS



## TORX BITS



## CIRCULAR SAW BLADE

### PROFESSIONAL WOOD CIR- CULAR SAW BLADE



### PROFESSIONAL ALUMINIUM CIRCULAR SAW BLADE



### DIAMOND DISCS (TURBO)



### DIAMOND DISCS (SEGMENTED)



### DIAMOND DISCS (CONTINUOUS)





# PROFESSIONAL HAND TOOLS & EQUIPMENT

# IRWIN

IRWIN

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## RECIPROCATING SAW BLADE

This comprehensive reciprocating saw blade offering has a blade for every application. IRWIN® blades offer superior construction & design making them faster cutting and longer lasting, therefore giving the user a superior cost-per-cut value.

The IRWIN® reciprocating range includes colour-coded packaging and labeling on the blade to easily identify the right blade for the right application.

RECIPROCATING SAW BLADE  
(METAL CUTTING BI-METAL)  
5PCS PER PACK



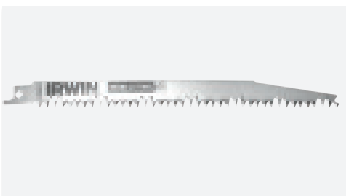
RECIPROCATING SAW BLADE ( METAL & WOOD CUTTING BI-METAL ) 5PCS PER PACK



RECIPROCATING SAW BLADE  
( WOOD CUTTING BI-METAL )  
5PCS PER PACK



RECIPROCATING SAW BLADE ( WOOD COMPOSITION MATERIAL AND PLASTIC CUTTING HCS )



# AIR COMPRESSORS, GENERATORS, BENDING & CUTTING MACHINES *dynamik* Werkzeuge GmbH

**DYNAMIK**

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## AIR COMPRESSORS

### DAC 50

Size Liter 50  
Db Measured at 4mt 72  
Cylinder 2/1  
L/minute 250  
C.F.M 8.8  
M3/H 15  
Bar 10  
PSI 145  
Hp 2  
Kw 1.5  
Weight 50t



### DAC 100

Size Liter 100  
Db Measured at 4mt 72  
Cylinder 2/1  
L/minute 250  
C.F.M 8.8  
M3/H 15  
Bar 10  
PSI 145  
Hp 2  
Kw 1.5  
Weight 62



### DAC 150

Size Liter 150  
Db Measured at 4mt 72  
Cylinder 2/1  
L/minute 250  
C.F.M 8.8  
M3/H 15  
Bar 10  
PSI 145  
Hp 2  
Kw 1.5  
Weight 86



### DAC 200

Size Liter 200  
Db Measured at 4mt 74  
Cylinder 2/1  
L/minute 330  
C.F.M 11.6  
M3/H 19.9  
Bar 10  
PSI 145  
Hp 3  
Kw 2.25  
Weight 102



### DAC 270 3 HP

Size Liter 270  
Db Measured at 4mt 76  
Cylinder 2/2  
L/minute 480  
C.F.M 17  
M3/H 29  
Bar 10  
PSI 145  
Hp 3  
Kw 3  
Weight 135



### DAC 270 4 HP

Size Liter 270  
Db Measured at 4mt 76  
Cylinder 2/2  
L/minute 480  
C.F.M 17  
M3/H 29  
Bar 10  
PSI 145  
Hp 4  
Kw 3  
Weight 135



### DAC 500 5.5 HP

Size Liter 500  
Db Measured at 4mt 78  
Cylinder 2/2  
L/minute 900  
C.F.M 31.8  
M3/H 56.2  
Bar 10  
PSI 145  
Hp 5.5  
Kw 5.6  
Weight 150



### DAC 500 7.5 HP

Size Liter 500  
Db Measured at 4mt 78  
Cylinder 2/2  
L/minute 900  
C.F.M 31.8  
M3/H 56.2  
Bar 10  
PSI 145  
Hp 7.5  
Kw 5.6  
Weight 150



# AIR COMPRESSORS, GENERATORS, BENDING & CUTTING MACHINES



## DYNAMIK

[www.unipro-ikk.com](http://www.unipro-ikk.com)

### DAC 500 10 HP

Size Liter 500  
 Db Measured at 4mt 78  
 Cylinder 2/2  
 L/minute 900  
 C.F.M 31.8  
 M3/H 56.2  
 Bar 10  
 PSI 145  
 Hp 10  
 Kw 5.6  
 Weight 150



### DAC 900

Size Liter 500  
 Db Measured at 4mt 78  
 Cylinder 2/2  
 L/minute 900  
 C.F.M 31.8  
 M3/H 56.2  
 Bar 10  
 PSI 145  
 Hp 7.5  
 Kw 5.6  
 Weight 150



## GASOLINE GENERATOR

### DKG 2400 W

Industrial Generator  
 Easy to Carry Bars for Better Mobility  
 Large Capacity Fuel Tank with Indicator  
 On/Off Switch  
 AC Power Plug Protected by a Hinged Flap  
 Air Cooled  
 DC Output  
 Easy Access to Oil Indicator  
 Hour Meter  
 Oil Alert



### DKG 3300 W

Industrial Generator  
 Easy to Carry Bars for Better Mobility, with Wheel Set  
 Large Capacity Fuel Tank with Indicator  
 On/Off switch  
 AC Power Plug Protected by a Hinged Flap  
 Air Cooled  
 DC Output  
 Easy Access to Oil Indicator  
 Hour Meter  
 Oil Alert



### DKG 5500 W

Industrial Generator  
 Easy to Carry Bars for Better Mobility, with Wheel Set  
 Large Capacity Fuel Tank with Indicator  
 On/Off switch  
 AC Power Plug Protected by a Hinged Flap  
 Air Cooled  
 DC Output  
 Easy Access to Oil Indicator  
 Hour Meter  
 Oil Alert



### DKG 9000 W

Industrial Generator  
 Large Capacity Fuel Tank with Indicator  
 On/Off switch  
 Electric start  
 AC Power Plug Protected by a Hinged Flap  
 Air Cooled  
 DC Output  
 Easy Access to Oil Indicator  
 Hour Meter  
 Oil Alert





# AIR COMPRESSORS, GENERATORS, *dynamik* BENDING & CUTTING MACHINES

Werkzeuge GmbH

DYNAMIK

[www.unipro-ikk.com](http://www.unipro-ikk.com)

## CUTTING MACHINES



Model							Capacity of Cut					
							65 Kg/mm <sup>2</sup>			85 Kg/mm <sup>2</sup>		
	cm	Kg	Kg	RPM	HP	Kw	Max. ø 1 Bar	Max. ø 2 Bar	Max. ø 3 Bar	Max. ø 1 Bar	Max. ø 2 Bar	Max. ø 3 Bar
DK-040010 DB32 39	80 x 57 x h.75	255	1.5	9	3	2.2	26	18	16	24	16	14
DK-040010 DB36 39	105 x 61 x h.82	475	3	9	4	3	30	20	16	26	18	14
DK-040010 DB42 39	118 x 71 x h.87	605	4	6	4	3	34	26	20	30	20	16
DK-040010 DB52 39	130 x 71 x h.92	730	4	6	5.5	4	44	30	24	36	26	22
DK-040010 DB55 39	130 x 71 x h.95	740	4	5.5-11	7.5	4	46	32	26	40	30	22

## BENDING MACHINES



Model							Capacity of Cut					
							65 Kg/mm <sup>2</sup>			85 Kg/mm <sup>2</sup>		
	cm	Kg	Kg	RPM	HP	Kw	Max. ø 1 Bar	Max. ø 2 Bar	Max. ø 3 Bar	Max. ø 1 Bar	Max. ø 2 Bar	Max. ø 3 Bar
DK-040020 DC32 39	85 x 90 x h.85	320	8	107	3	2.2	28	22	18	26	20	16
DK-040020 DC36 39	86 x 90 x h.85	355	8	90	4	3	32	24	18	30	22	18
DK-040020 DC44 39	105 x 95 x h.89	490	03	90	4	3	36	28	22	34	26	20
DK-040020 DC54 39	105 x 95 x h.89	575	13	40	5.5	4	42	32	26	38	30	24
DK-040025 DC56 39	105 x 95 x h.89	620	13	40	7.5	5.5	44	34	28	40	32	24

# LOCATIONS

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Fax: +966 12 627 8722

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Fax: +966 12 532 1675

### Riyadh

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Fax: +966 11 456 6627

### Qassim / Buraidah

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Fax: +966 16 385 2186

### Skakah / Qurayyat

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### Hofuf

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## FACTORIES

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Specialized Factory for Steel Products  
**3rd Industrial City / Jeddah**

Tel: +966 12 637 4482  
Fax: +966 12 636 1963

### SFSP / UAE

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### SFSP / Egypt

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