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We, in KIVOLT Team, aim not just to conduct business with our clients but to make win-win situations through adding value by supporting them with our expertise, knowledge and highly technical team. Our products and services are of high quality and high cost efficiency at the same time because we believe that this is the perfect combination in any market and at any level.

The company trades building and construction materials that conform with international standards of quality and safety that are manufactured in international factories equipped with high tech robotics, welding machines, CNC machines and an in-house Galvanization facility.

Looking forward for future collaboration.

Kivolt ean

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# FACTORIES

# SFSP

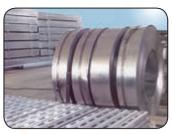
SFSP is a leading manufacturer and fabricator of steel and aluminum products used for the support of equipment for industrial, commercial, utility and OEM installations. Our customers have access to the most complete support systems offered in the industry including metal framings, cable trays, pipe hangers, slotted angles, fasteners, plastering and blockwork accessories and others. (SFSP is equipped with an in-house hot dip galvanization facility).



www.sfsp-ikk.com



#### HOT-DIP GALVANIZATION PROCESS





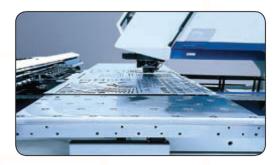


CNC MACHINES

















Specialized Factory for Steel Products (Jeddah/KSA)
Sigma Factory for Steel Products (Ajman & Umm Al Quwain /UAE)
Specialized Factory for Steel Products (6th of October/Egypt)
Specialized Factory for Steel Products (Amman/Jordan)

KIVOLT plastering & blockwork accessories from SFSP are manufactured in compliance with:

- NEMA VE 1-2009
- NEMA VE 2-2006
- IEC 61537
- BS EN 61537:2007
- BS 5750/BS EN 10130
- BS EN 10131
- BS EN 10051
- CENELEC EN 50173-1
- EIA/ITA 568 A
- ISO/IEC 11801; 2002.









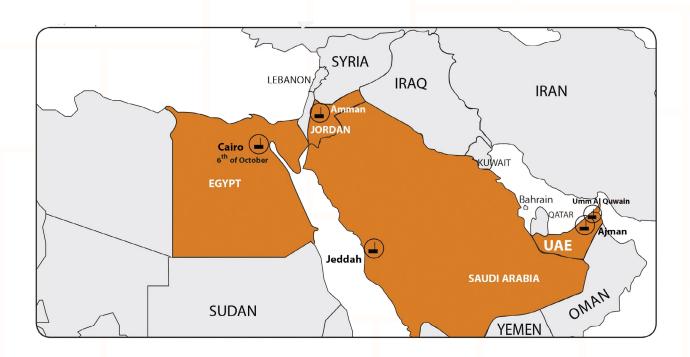




**→**>

Plastering and BlockWork accessories' items are designed to meet most requirements and comply to local and international standards of fabrication and finishing.

This catalogue is designed to be helpful to engineers and contractors in the application and selection of products for construction and maintenance. If a unique application requires a special product not included in this catalogue, KIVOLT engineering personnel are ready to furnish design consultation and realistic cost estimates. In addition, know-how are available for your convenience.



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# Materials

### of Plastering Accessories

#### PLASTER BEADS TECHNICAL SPECIFICATIONS

KIVOLT manufactures Plaster Beads in accordance with:

- BS EN 13658-1:2005 For Internal Plastering
- BS EN 13658-2:2005 For External Rendering

#### RELEVANT STANDARDS

- BS EN 13914-1:2016 For External Rendering
- BS EN 13914-2:2016 For Internal Rendering
- BS 6452:Part 1:1984
- BS 5262:1991
- BS 8212:1995

#### **FINISHING**

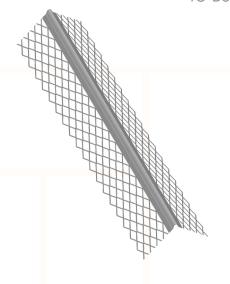
- Galvanized Steel according to BS EN 10346:2015
- Stainless Steel according to BS EN 10088-2:2014

#### FOR INTERIOR APPLICATIONS: GALVANIZED

- Steel according to BS EN 10327 superseded by BS
- EN 10346:2009, zinc coated on both sides.

### FOR EXTERIOR APPLICATIONS AND HUMID ENVIRONMENT:

- Austenitic stainless steel according to BS EN 10088- Mat.No.1.4301 METAL BEADS



#### METAL BEADS

Relevant Standards:

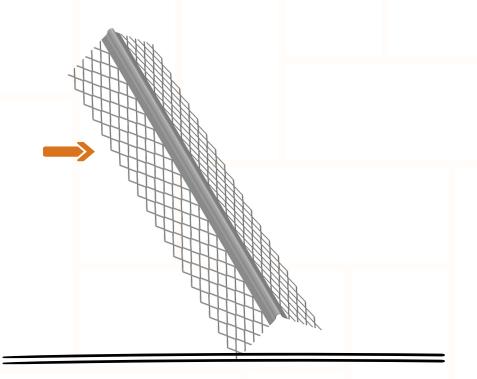
- BS EN 13914-2: 2005 Design, Preparation and Application of External Rendering and Internal Plastering
- BS EN 13658-1 : 2005 Metal Lath and Beads Definitions , Requirements and Test Methods , Internal Plastering Supersedes
- BS 1369-1 :1987 and BS 6452-1 : 1984
- BS EN 13658 2: 2005 Metal Lath and Beads Definitions, Requirements and Test Methods, External Plastering Supersedes BS 1369-2:1987 and BS 6452-2: 1984
- ASTM C841 Standard Specification for Installation of Interior Lathing and Furring
- ASTM C847 Standard Specification for Metal Lath
- ASTM C1063 Standard Specification for Installation of Lathing and Furring for Portland Cement Based Plaster
- International Building Code, (IBC) Chapter 25
- International Residential Code , (IRC) Chapter 7

#### **GALVANIZED STEEL:**

-BS EN 10346:2009 (formerly BS EN 10142: 1991) ASTM A 653/A 653M

#### STAINLESS STEEL:

- BS EN 10088-2:2005 (which was directly equivalent to formerly BS 1449:Part 2:1983
- ASTM A240/A240M



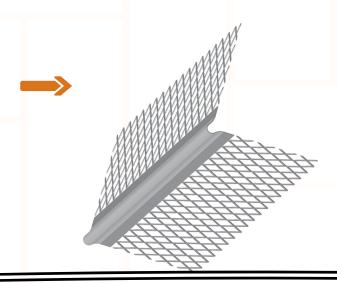


#### PLASTER BEADS

Our comprehensive range of Plaster Beads are precisionengineered and simple to use. Fixing by nail or plaster dab is straight-forward and fast, generating arises, edges, corners and joints that are easy to form and resistant to chipping, cracking and impact damage.

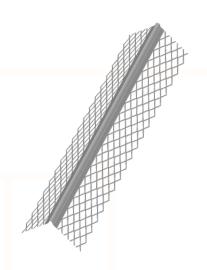
# Installation of Beads

- ➤ Use one of the following methods to fix angle beads and plaster stop beads:
  - A) Using galvanized or stainless steel nails complying with BS 1202: Part 1, fixed at a maximum of 600mm apart.
  - B) Pressing the bead onto dabs of the same material as the undercoat, dabs should be applied at a maximum of 600mm apart.
  - C) When beads are used with metal lath backgrounds, galvanized or stainless steel tying wire may be used to secure the beads in position. All wires should be twisted tightly and the ends bent away from the finished face of the coating.





Angle bead provides with its solid metal nose a straight corner. Expanded diamond mesh wings allow for keying the plaster right up to the nose of thebead. It is designed to protect the corners.

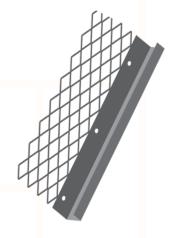


Length of Wings (mm)	Plaster Depth (mm)	Length (mm)
50 x 50 , 63 x 63	12 - 19	2850
70 x 70	19	2850

For other dimensions... feel free to contact KIVOLT SALES TEAM.



Plaster stop bead provides a straight accurate line, it is used to reinforce the plaster or render on its edge. Plaster stop bead is designed as a universal plaster stop used at wall ends, door and window openings to make a neat, flush frame.

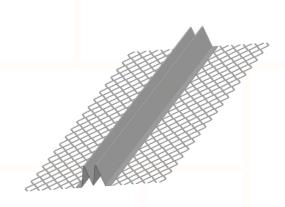


Plaster Depth (mm)	Length (mm)
13 - 16 - 19	2850



# Control Joint Bead

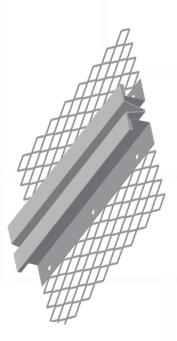
Designed to minimize the plaster cracking and to allow movement in the plaster. Control Joint Bead overcomes movement tolerances in plaster Expansion / Control joints provide excellent expansion control for both walls and ceiling and offers positive locking of the stucco to the edge of the joint.



# Movement Bead

Movement Beads are used to relieve the stress and strain in large plaster areas of wall and ceiling stucco areas and to allow for movement between adjoining surface finishes.

Plaster Depth (mm)	Length (mm)	
13 - 16 - 19	2850	

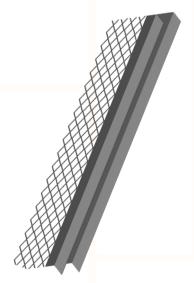


For other dimensions... feel free to contact KIVOLT SALES TEAM.

# ARCHITRAVE

Mainly used for decorative purposes to give a channel gap or a shadow between different wall finishes.

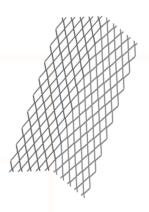
Plaster Depth (mm)	Length (mm)	
13 - 16 - 19	2850	



Corner Mesh

Corner Mesh lathes are used to prevent cracking in the plaster of the corner, and by protecting the inner corner against various factors.

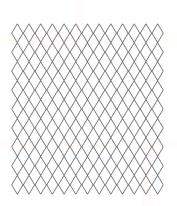
Length of Wings (mm)	Length (mm)
50 x 50 , 63 x 63 , 70 X 70	2850





# Metal Sheet Lath

Sheet lath is applied on suspended ceiling and walls, encasing steel columns and beams and reinforcing plaster between dissimilar areas and at crack-prone areas adjacent to openings.



Sheet Width (mm)	Length (mm)	Weight (kg/m²)
600	2440	0.64 - 2.00





It offers effective joint and crack reinforcement.

Coil Lath Width (mm)	Length (mm)
70, 75, 100, 150, 200, 250	3000



#### **RIB LATH**

Width (cm)	Length (cm)	Density (kg/m²)
70	250	1.84

For other dimensions... feel free to contact KIVOLT SALES TEAM.



#### FIBERGLASS MESH

Width (cm)	Length (cm)	Density (kg/m²)
100	500	1.20





Width (cm)	Length (cm)	Density (kg/m²)
45	250	3



## Materials of Steel Lintels

### a Blockwork Accessories

#### **KIVOLT MANUFACTURES**

Blockwork Accessories in accordance with:

- BS EN 845-1:2013+A1:2016

Relevant Standards

- BS 1243:1978

#### MANUFACTURE SPECIFICATIONS

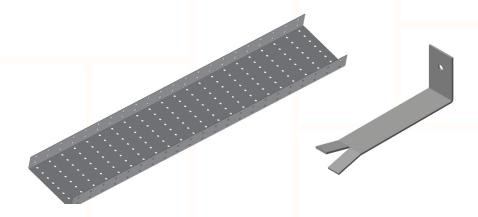
- Steel Lintels manufactured to BS 5977: Part 2:1983 / BS EN 845-2:2013+A1:2016.
- Wall Ties manufactured to BS EN 845-1:2003 (Formerly BS 1234).
- Block Reinforcement Ladder and Truss manufactured as per ASTM A82 / ASTM A951 / BS EN 845-2:2013+A1:2016.

#### **FINISHING**

- Galvanized Steel according to BS EN 10346:2015
- Hot Dipped Galvanized according to BS EN ISO 1461:2009
- Stainless Steel according to BS EN 10088-2:2014

#### **Materials**

- Hot rolled steel S235JR as per EN 10025 / ASTM A-1011 CS Type B (formerly ASTM A569 or ASTM A570)
- Cold rolled steel DC01 as per EN 10130:2006 / ASTM A1008 CS Type B (formerly ASTM A-36)

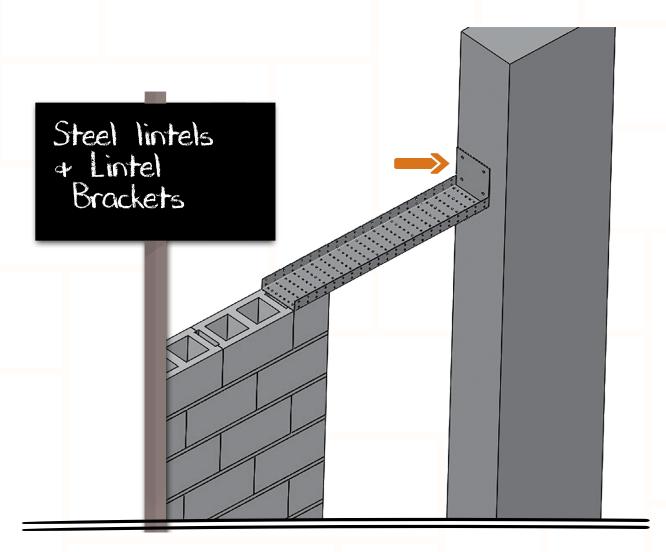




Steel Lintels provide a combination of strength and light weight, resulting in efficient load bearing performance and increased productivity on site.

They are characterized by their ease of installation in addition to time as well as money saving.

Calculations are provided by our design office.



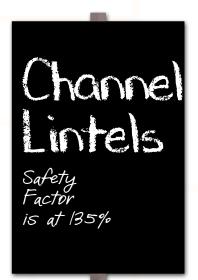


### h=50 / w=100 WORKING LOAD TABLES

Sheet Thickness ( mm )	2.0	3.0	4.0
Length in <b>meters</b>	Uniform	ly Distributed Loads <b>(F</b>	«N/m)
0.90 - 1.02	0.44	1.5	2.55
1.30 - 1.50	0.29	1.0	1.70
1.60 - 1.80	0.20	0.72	1.10
1.90 - 2.10	0.14	0.52	0.68
2.20 - 2.40	0.10	0.33	0.43

## h=75 /w=100 WORKING LOAD TABLES

Sheet Thickness ( mm )	4.0
Length in <b>meters</b>	Uniformly Distributed Loads (kN/m)
0.90 - 1.02	3.55
1.30 - 1.50	2.40
1.60 - 1.80	1.70
1.90 - 2.10	1.28
2.20 - 2.40	0.98



### h=50 /w=150 WORKING LOAD TABLES

Sheet Thickness ( mm )	2.0	3.0	4.0
Length in <b>meters</b>	Uniformly Distributed Loads (kN/m)		
0.90 - 1.02	0.44	1.5	2.65
1.30 - 1.50	0.28	1.0	1.76
1.60 - 1.80	0.20	0.72	0.74
1.90 - 2.10	0.14	0.52	0.68
2.20 - 2.40	0.10	0.35	0.47

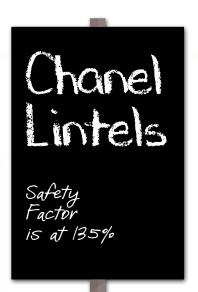
## h=75 /w=150 WORKING LOAD TABLES

Sheet Thickness ( mm )	4.0
Length in <b>meters</b>	Uniformly Distributed Loads (kN/m)
0.90 - 1.02	3.60
1.30 - 1.50	2.40
1.60 - 1.80	1.73
1.90 - 2.10	1.28
2.20 - 2.40	0.98

For other dimensions... feel free to contact KIVOLT SALES TEAM.

## h=50 / w=200 WORKING LOAD TABLES

			10/12 1/12120
Sheet Thickness ( mm )	2.0	3.0	4.0
Length in <b>meters</b>	Uniform	'y Distributed Loads <b>(</b> 1	kN/m)
0.90 - 1.02	0.42	1.5	2.70
1.30 - 1.50	0.28	1.0	1.80
1.60 - 1.80	0.19	0.72	1.25
1.90 - 2.10	0.13	0.52	0.78
2.20 - 2.40	0.09	0.40	0.49



### h=75 / w=200 WORKING LOAD TABLES

Sheet Thickness ( mm )	4.0
Length in <b>meters</b>	Uniformly Distributed Loads (kN/m)
0.90 - 1.02	3.60
1.30 - 1.50	2.40
1.60 - 1.80	1.73
1.90 - 2.10	1.28
2.20 - 2.40	0.98

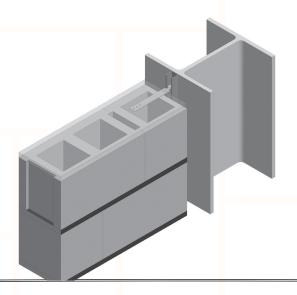


# Installation of Wall Ties

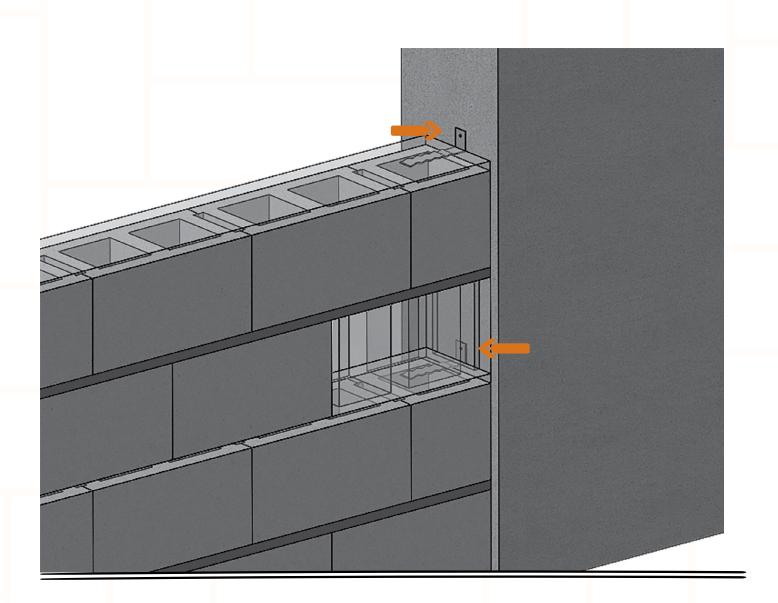
Cavity wall ties provide stability to masonry walls and care should be taken during installation to avoid the ingress of water to the inner skin and potential failure. Wall ties should be installed in accordance to guidance given in BSI PD 6697.

(formerly BS5628 Code of Practice for use of masonry)

- Wall Tie embedment should be at least 50mm in both leaves
- Wall Ties should be embedded into mortar and not placed onto dry masonry with mortar applied around the wall tie
- Density should not be less than 2.5 ties per square metre with density increased vertically around openings (900mm Horizontally, 450mm Vertically) Cavity Wall Ties are classified in to four types as detailed in Table 10 of BSI PD 6697: 2010



Classification of wall tie by end use (as BSI PD 6697 : 2010)

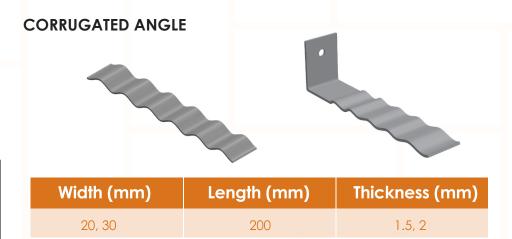




# Debonding Tie

3 Hole Block Tie

Plain Block Tie



Corrugated Angle Twisted Fish Tail Butterfly Tie

#### TWISTED FISH TAIL





Width (mm)	Length (mm)	Thickness (mm)
20, 30	200	1.5, 2

#### **BUTTERFLY TIE**



A range of butterfly ties are available and manufactured in accordance with BS 123:1978. These are available in stainless steel, pre-galvanized or hot-dip galvanized steel.

For other dimensions... feel free to contact KIVOLT SALES TEAM.





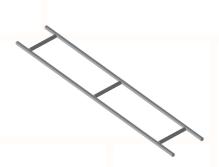
#### ADJUSTABLE HEAD RESTRAINT (AHR)

Head Restraints provide the necessary restraint to the top of masonry walls. They allow for vertical movement to accommodate shrinkage or thermal movement of the wall or structural frame, while restraining wind loads.

PARTITION TOP ANCHOR







Туре	Width (mm)	Length (mm)
T Shape, Overlap	50, 100, 150, 200	3000

Truss Type Block Ladder can be manufactured upon request.

For other dimensions... feel free to contact KIVOLT SALES TEAM.

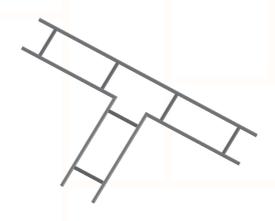




Bends, Tee-branches and intersections can be manufactured upon request. Corner units provide continuity of reinforcement and can be cut and bent on site.

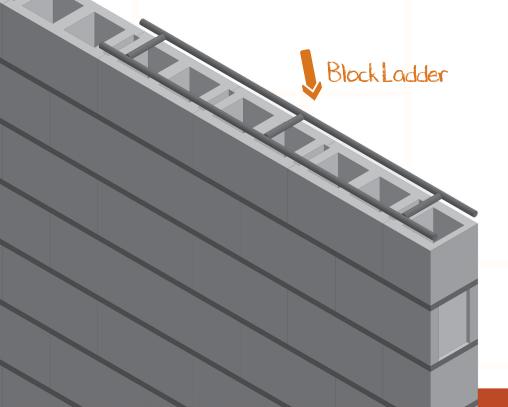
Description	Туре	Width (mm)
Ladder 90D - Accessory	T Shape, Overlap	50, 100, 150, 200





Description	Туре	Width (mm)
Equal T-Branch - Accessory	T Shape, Overlap	50, 100, 150, 200

For other dimensions... feel free to contact KIVOLT SALES TEAM.



# Block Reinforcement Mesh

#### **USAGE:**

Block Reinforcement Mesh is laid between courses in blockwork and embedded in the mortar jointing. It forms an integral structure of great tensile strength which is resistant to stresses, vibrations and temperature changes.



Coil Width (mm)	Block Width (mm)	Coil Length (m)
70	100	30
75	100	30
100	150	30
150	200	30
200	250	30



