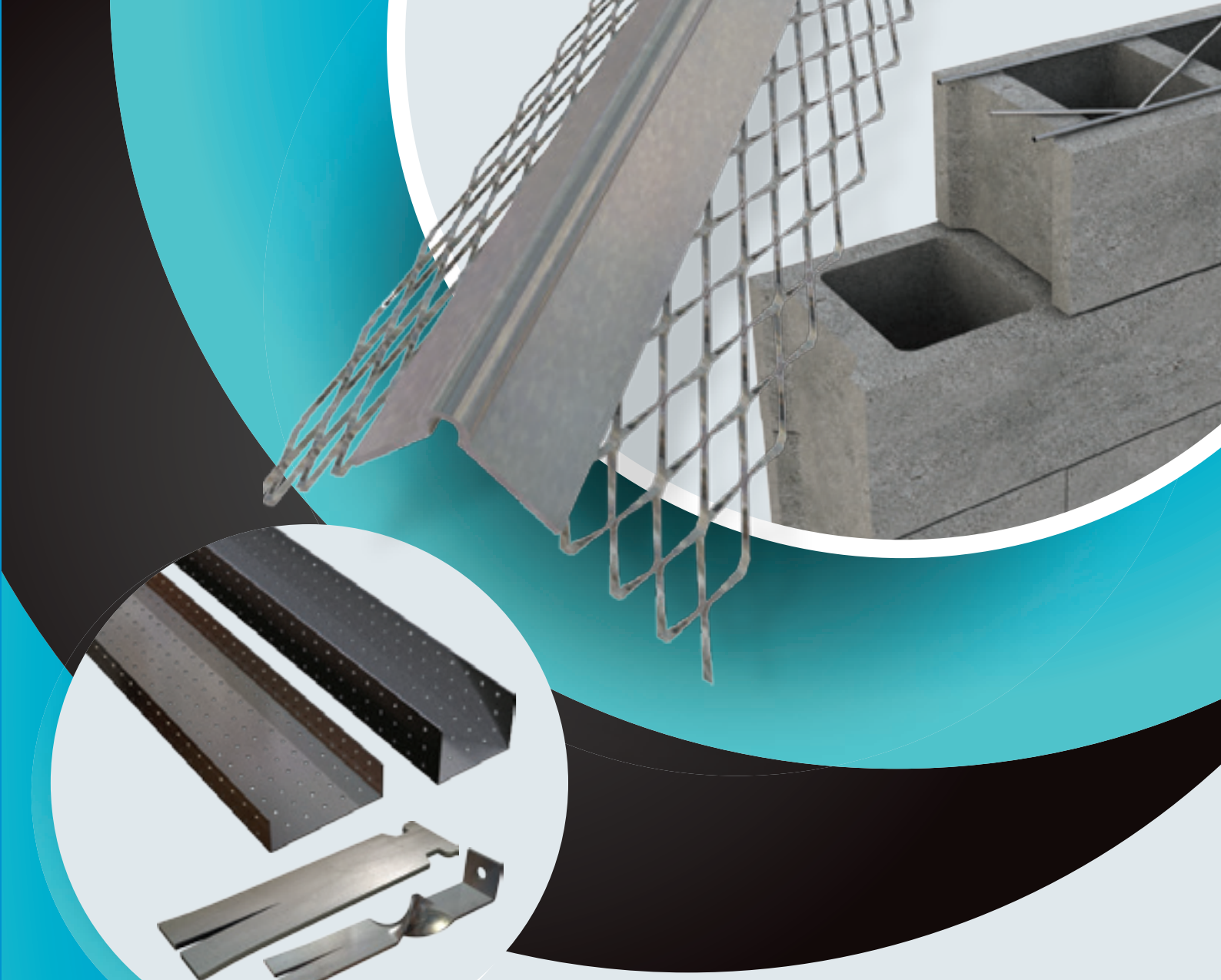
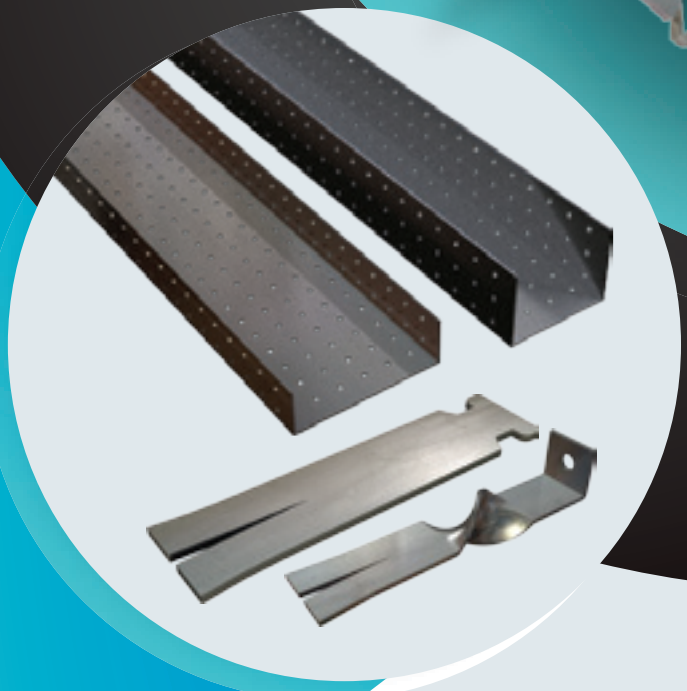


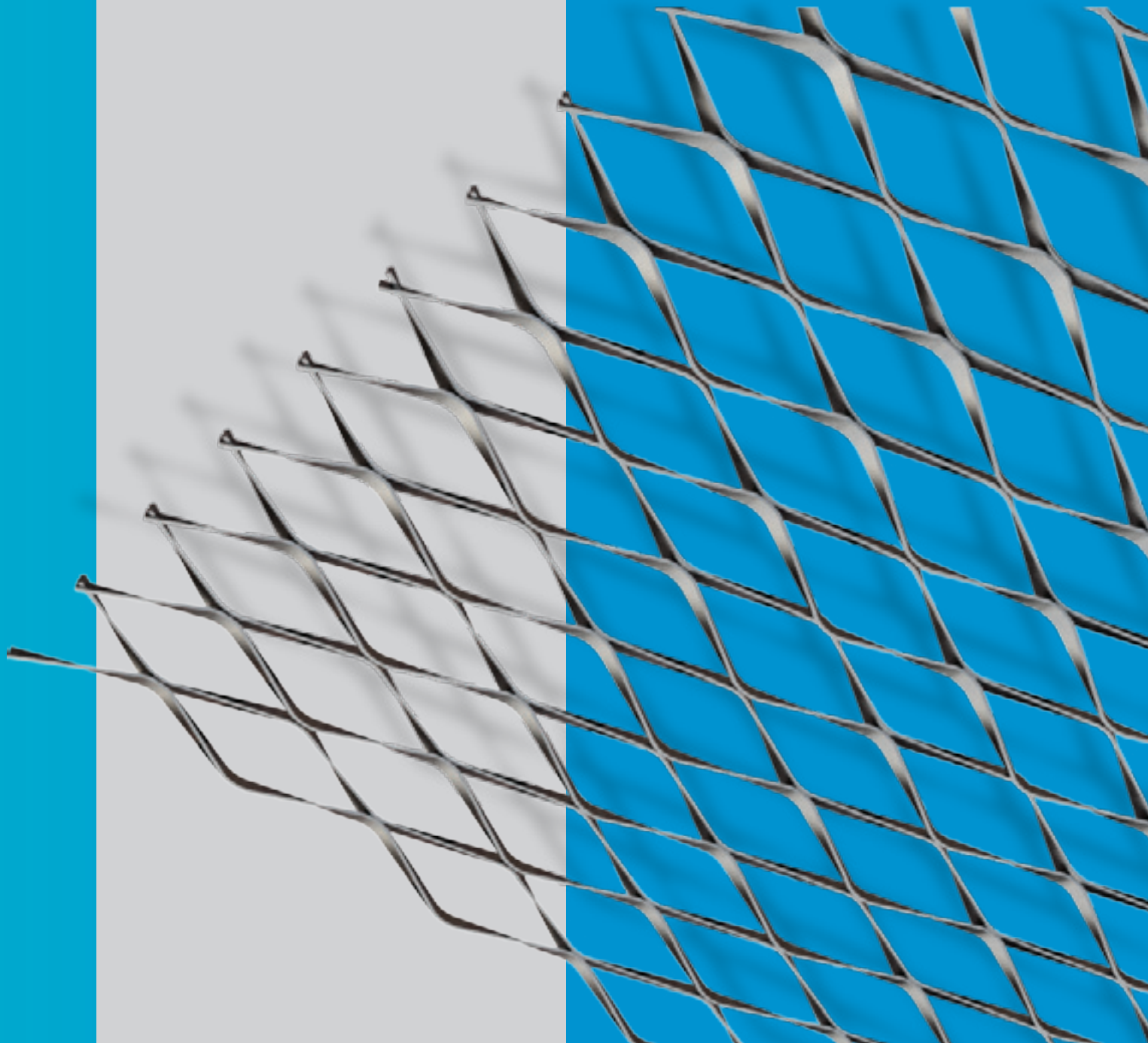


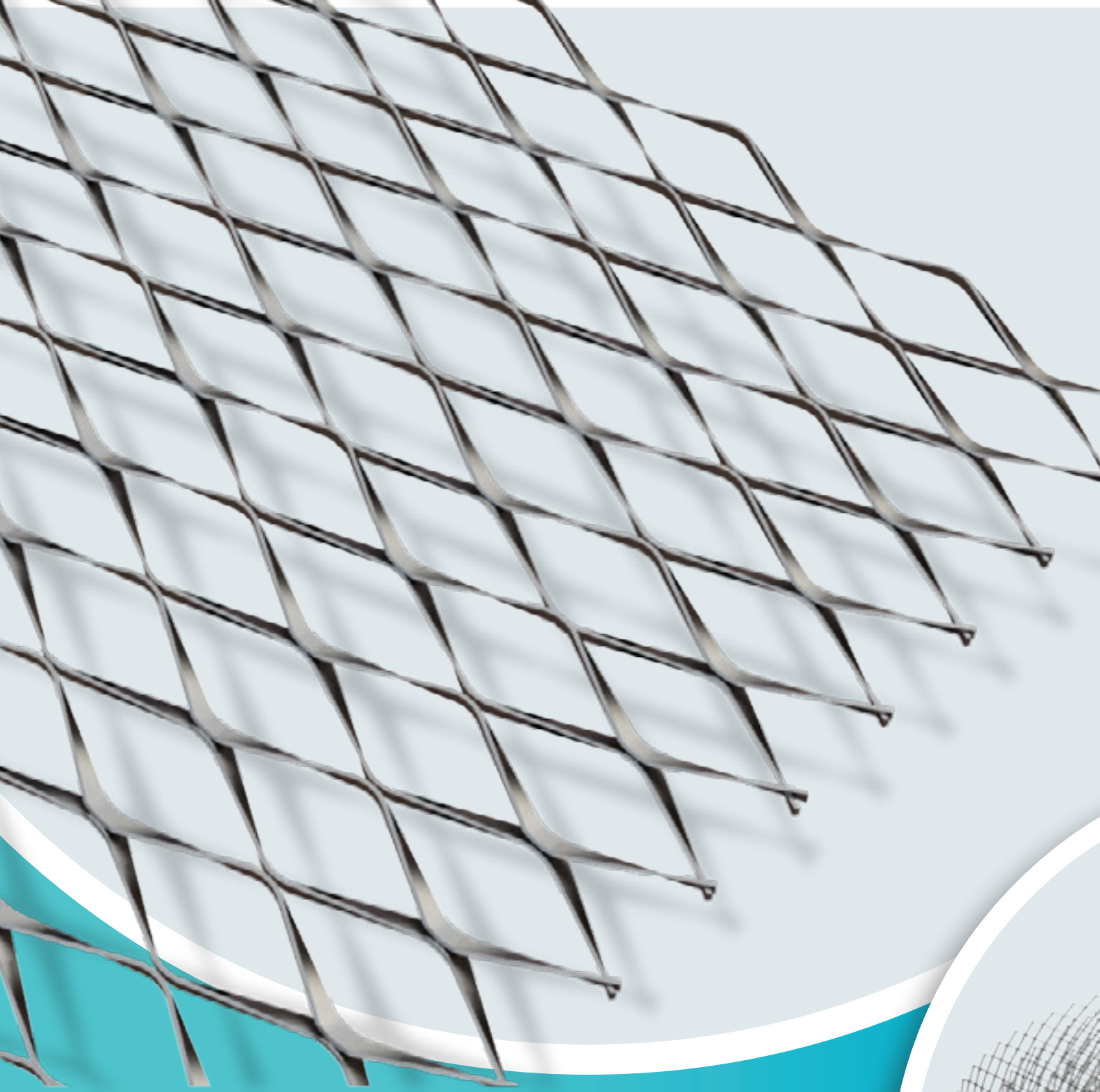
PLASTERING & BLOCK WORK ACCESSORIES

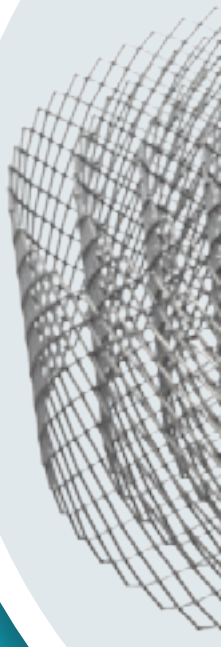
CATALOGUE

SFSP
Specialized Factory
for Steel Products /s.a.r.l
www.sfsp-lebanon.com

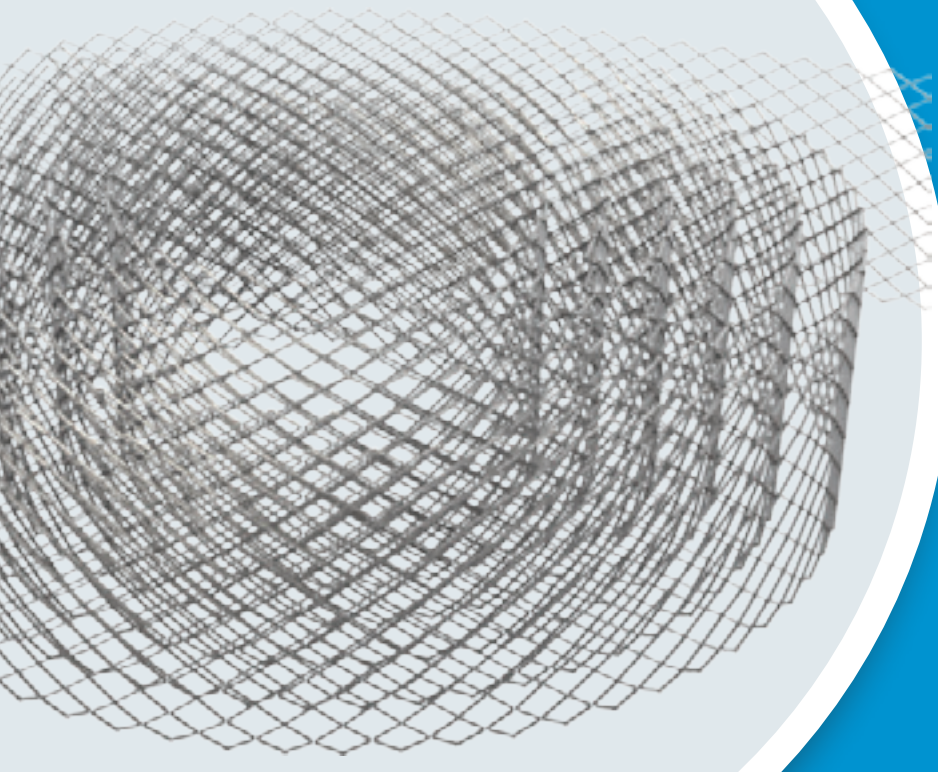
INDEX







ABOUT SFSP



SFSP
Specialized Factory
for Steel Products /s.a.r.l
www.sfsp-lebanon.com

Specialized Factory for Steel Products is a leading factory in Lebanon, established in the year 2011 to serve the steel construction products industry in Lebanon and the region.
Production at the factory is observed using modern practices of manufacturing methods in the steel construction industry with a definite compliance to international standards of fabrication.
SFSP adapts quickly and easily to market demands and requirements. The factory is operating a top of the line production machinery, automated with high technology to ensure quality and maintain speed with delicacy.
Quality at SFSP is uncompromised; the factory is working as per ISO 9001: 2008 Quality Management System, with care for the safety of its workers and clients as well as the welfare of its society by acknowledging the environmental key issues, trying to maintain a pollution-free production facility

TECHNICAL SERVICES

A crucial factor in the job of a factory is to provide continuous technical services and consultations.
That's why SFSP has invested in a professional team of researchers and specialists.
SFSP has recruited brilliant graduates and experienced engineers having the appropriate knowhow on the on latest technology changes and development in the steel building materials industry.
The product range is developed and updated according to the relevant standards of fabrication across markets, whilst the business processes are evaluated to achieve maximum efficiency.

SFSP R&D Core Objectives

- Carry out responsibilities effectively in a safe and healthy work environment.
- Develop and implement research programs relevant to the products and solutions introduced and ensure that the results are communicated clearly in-house and among the clients , concisely and accurately.

SOCIAL RESPONSIBILITY

Being socially responsible is a part of who we are and how we do our business. We aim to provide useful products and services, to provide jobs and development opportunities for our communities, and to gain satisfaction through meaningful work.
We make a difference by acting on the values and principles of our societies and we inspire others to do so. At SFSP, we anticipate and reduce threats caused by environmental changes or natural disasters, and we are well adapted to significant social changes.
We contribute to a more sustainable society by means of value and support to our consumers, supply chains, and stakeholders. We are keen to identify ways they can improve our impacts on the people and places we work and live in, and thereby become more valuable and valued members of society.

- Organizational governance: We promote accountability and transparency at all levels, thus, promoting responsibility
- Human care: We treat individuals with respect; and make efforts to help members of vulnerable groups
- Labor practices: We provide just, safe and favorable conditions to workers
- Environment: At SFSP, we Identify and improve environmental impacts of our operations, including the resource use of natural resources and waste disposal.
- Fair operating practices: Practicing accountability and fairness in dealings with other businesses

At SFSP, we are committed to continuous improvement ongoing learning, process review and innovative thinking that foster new initiatives; and better practices. Our environmental programs evolve to meet today's changing needs while; protecting resources for future; generations.

ENVIRONMENTAL AWARENESS

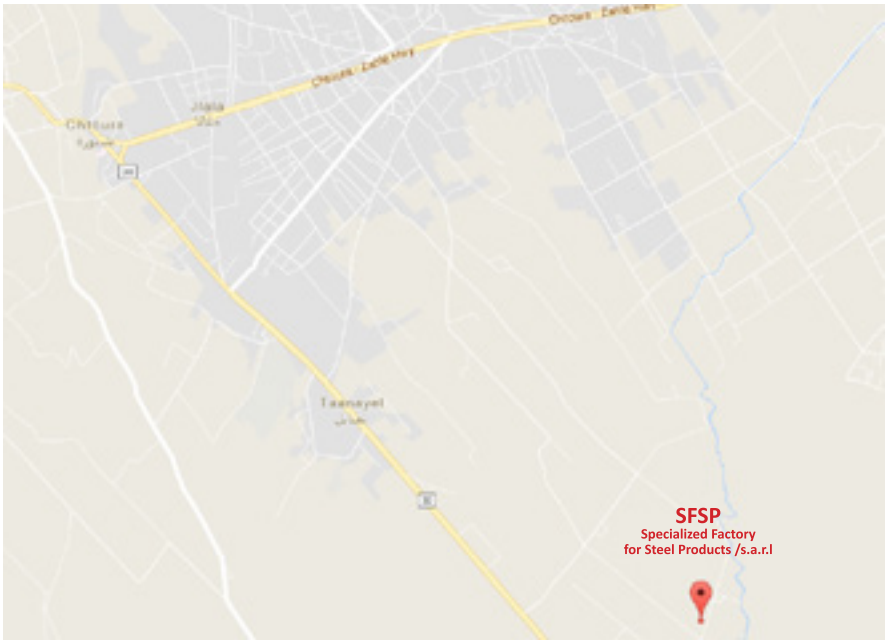
SFSP is committed to the following:

- Compliance with all statutory and regulatory requirements related to its activities, products and services and the environmental aspects.
- Identifying quality and environmental objectives by review and audit of the processes both in-house and on-site.
- Formally setting objectives based on the results of the process reviews and their significance in relation to their impact on the environment and the continual improvement of the quality and environmental management system.
- Implementing management programs to achieve these objectives.
- Investing in a well-trained and motivated workforce.
- Working closely with suppliers and customers to ensure mutual understanding and benefits of the environmental aspects consideration.
- Reviewing our policy and objectives as part of the Management Review Process.
- Communicating this policy to all persons working for or on behalf of the organization.
- Preventing and minimizing Pollution to the environment.

LOCATION

SFSP / Lebanon
management@sfsp-lebanon.com

Specialized Factory for Steel Products / s.a.r.l
Tanayel, Bekaa
Tel: +961 8 514 290
Fax: +961 8 514 291



HEALTH AND SAFETY

The Factory Management regard the health and safety of the employees, clients and all others that may be affected by their operations to be of a major importance.

In support of this, the management promotes health and safety throughout the Factory's operations and endeavour to engender a positive attitude in all employees towards the prevention of accidents and maintenance of healthy working arrangements.

The Factory satisfies the requirements of the Health, Safety and related legislation by setting out the responsibilities of all levels of staff and the arrangements for carrying out those responsibilities and in particular do what is reasonably practicable to:

1. Maintains safe & healthy working conditions.
2. Ensures that all facilities and equipment are safe and properly maintained.
3. Provides products that can be applied and used safely and without risk to health.
4. Provides and maintain working procedures, that are safe and without risk to health, throughout the its operations in respect of:

- **The use, handling, storage, transports and disposal of materials and substances.**
- **The use of factory equipment.**
- **Potential emergency situations, including first aid, fire and escape of substances.**

5. Ensure the competence of employees.

SFSP facilities are equipped with advanced machinery amongst are Cable Management Production Lines, Steel cladding systems production lines, metal lathes and blockwork production line, garbage and linen chutes production line, and also partition and ceiling profiles production capacity, and Computerized Numerical Cut machines to ensure delicacy and speed of delivery.

SFSP PRODUCTS

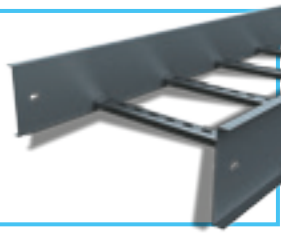
SFSP produces a variety of products ranging from cable management systems; cable trays, cable ladders, basket trays, trunkings and support systems, to mechanical cladding fixations, steel lintels and block work accessories, plasterers' beads, expanded metal and block work reinforcement, strut channel systems, pipe clamps & hangers, gypsum profiles as well as garbage and linen chutes. With the introduction of new machines and the enhancement of production methods, SFSP continues to develop its production methods systematically as well as thoroughly.

Cable Trays & Accessories

Cable Trays are designed to meet most requirements of cable and electrical wire installations and comply to local and international standards of fabrications and finishes.

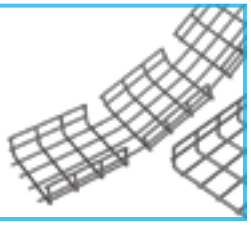
Cable Ladders (Welded & Swaged)

Cable Ladders of different side heights are available upon request.



Basket Trays & Accessories

SFSP's Basket Tray systems make connections fast and simple with limited need for tools. Its design allows for continuous airflow, and prevents heating up of cables. SFSP's Basket Tray comes in a full range of sizes and is made with high-strength welded steel wires.



Cable Trunkings

Cable Trunkings and Accessories are offered in a comprehensive range. Mill galvanized, hot-dip galvanized, and powder coated are the various finishes produced in our factories.

Underfloor Trunking

Underfloor Trunking Systems solutions incorporate a range of products for the distribution of power and data services , it is a coordinated set of containments that protect, segregate, contain, and route cables within a given environment.

Cable Management Support Systems

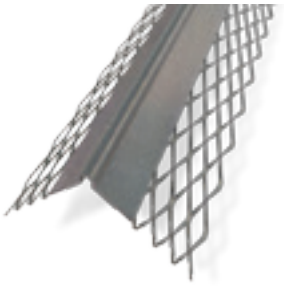
Cable Support Systems are well designed to provide necessary support for cable trays, cable ladders and trunkings. Cable supports are manufactured according to common standards from high quality raw materials.

C-Channel Strut Systems

SFSP's Metal Framing Systems provide an economical solution for electrical, mechanical and industrial supports with a wide variety of applications in the construction industry.
Applications: - Pipe and Conduit Supports - Tunnel Pipe Stanchions - Racks and Shelvings - Wall Framings.

Expanded Metals, Plasterers` Beads

Expanded Metals help the formation of joints, protection of corners and resistance against cracks, chips and impact damage.



Block Ladder Reinforcement

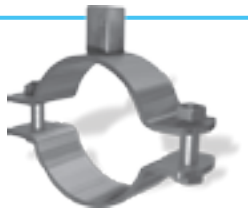
SFSP ladder and truss types are used for the reinforcement of brick and block masonry to give improved tensile strength to walls subjected to lateral loading e.g. wind and seismic. SFSPblock reinforcements reduces the risk of cracking either at stress concentration around opening.

Steel Lintels & Block Work Accessories

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.

Pipe Clamps & Hangers

Pipe Clamps and Hangers from SFSP used in the support of pipes and equipments are manufactured according to the highest standards of fabrication.A diversified choice of Pipe Hangers, Pipe Clamps, EMT Straps, Omega Clamps, Beam Clamps, J and U-Bolts and Threaded Accessories.



Marble & Granite Fixings

Stangle Cladding Fixation includes design, calculation and production of several types of mechanical fixings and accessories used for cladding purposes. Stainless and galvanized steel are among the various materials used in the fabrication.

Dry Wall & Ceiling Profiles

SFSP provides a complete product range for dry wall and ceiling constructions. Studs, Runners, Furring Channels, Ceiling Channels and Wall Angles are among the range of products produced to service the dry wall installers.

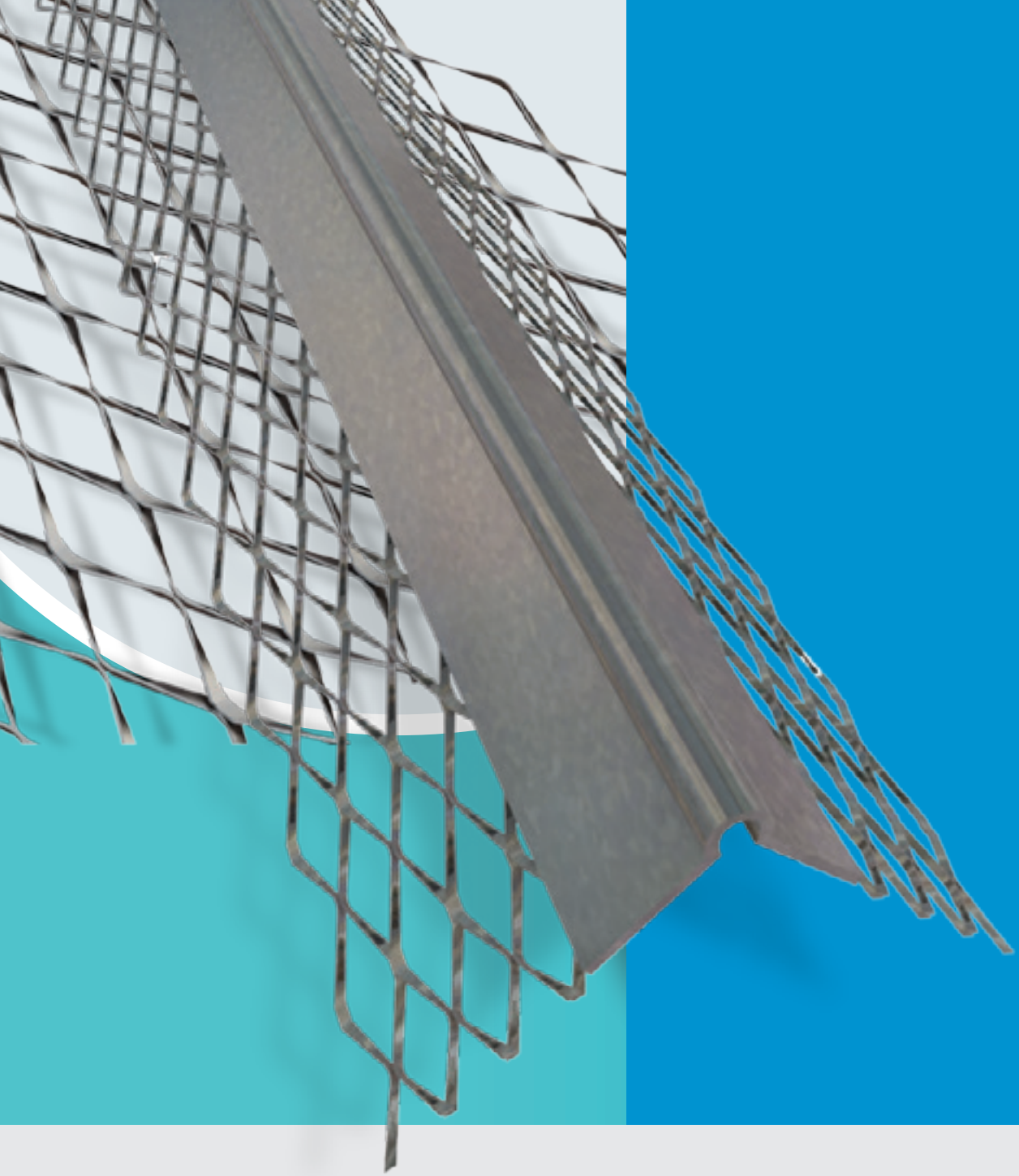
Garbage & Linen Chutes

Chutes from SFSP are very convenient, simple and low cost method of controlling and disposing of refuse and linen. Chutes meet the most stringent requirements of environmental health and safety. Chutes are used as original equipment in new buildings, such as : Hotels, Hospitals, High Rises and Residential Towers.

Expansion joints COVERS

SFSP manufactures architectural lines of thermal, seismic, waterproof, and fire-rated expansion joint systems meeting aesthetic and structural demands of multiple projects including airports, hospitals, commercial and residential buildings, shopping malls, and several other structural types

Materials used in SFSP expansion joints systems includes 6063 Aluminum, Rubber (Natural and Neoprene), Stainless Steel, TPE.



PLASTERERS' BEADS

PLASTERERS` BEADS

SFSP manufactures Plasterers' 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

TECHNICAL SPECIFICATIONS

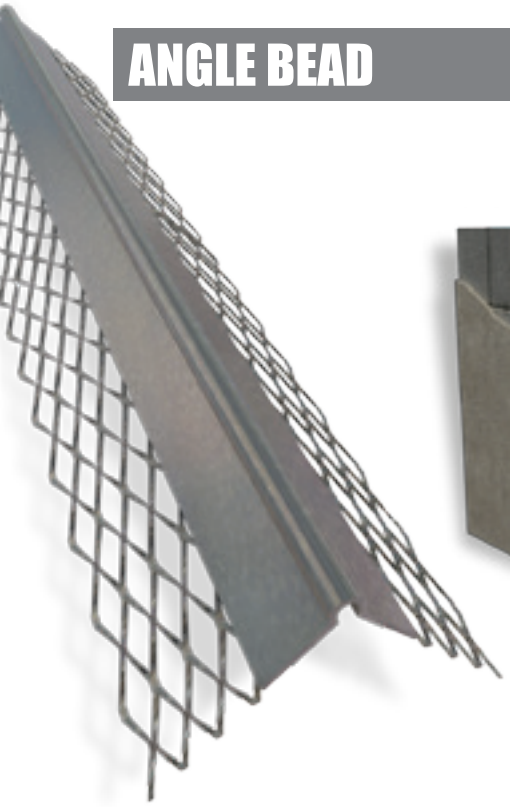
METAL BEADS

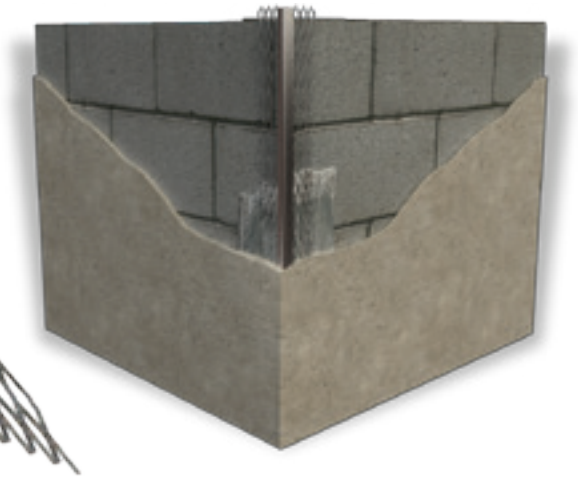
Relevant Standards:
• BS EN 13914- 2 : 2005 Design , Preparation and Application of External Rendering and Internal Plastering
• BS EN 13658-1 : 2005 Metal Lath and Beads Definitions , Requirements and Test Methods , Internal Plastering Supersedes BS 1369-1 :1987 and BS 6452-1 : 1984
• BS EN 13658 2 : 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

ANGLE BEAD





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

The flanges can be easily fixed over irregular, uneven surfaces. Guarantees a perfect bond and provides better effective reinforcement at corners where it is mostly needed.

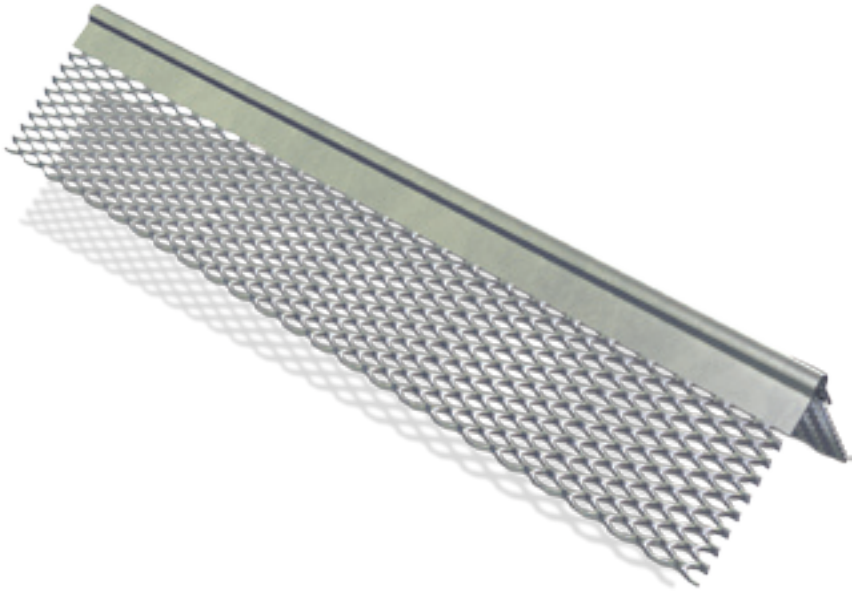
Angle bead is recommended for a greater corner protection and a precise straight line. Available in galvanized finish for internal use, and in stainless steel for external use.

Description	Length of wings (mm)	Plaster Depth (mm)	Length (mm)	Material
Angle Bead	50	12 - 19	2700	GI (Galvanized Steel)
Angle Bead	50	12 - 19	2850	GI (Galvanized Steel)
Angle Bead	50	12 - 19	3000	GI (Galvanized Steel)
Angle Bead	65	12 - 19	2700	GI (Galvanized Steel)
Angle Bead	65	12 - 19	2850	GI (Galvanized Steel)
Angle Bead	65	19	3000	GI (Galvanized Steel)
Angle Bead	70	19	2700	GI (Galvanized Steel)
Angle Bead	70	19	2850	GI (Galvanized Steel)
Angle Bead	70	19	3000	GI (Galvanized Steel)
Angle Bead	75	19	2700	GI (Galvanized Steel)
Angle Bead	75	19	2850	GI (Galvanized Steel)
Angle Bead	75	19	3000	GI (Galvanized Steel)

Description	Length of wings (mm)	Plaster Depth (mm)	Length (mm)	Material
Angle Bead	50	12 - 19	2700	SS A4 (Stainless Steel)
Angle Bead	50	12 - 19	2850	SS A4 (Stainless Steel)
Angle Bead	50	12 - 19	3000	SS A4 (Stainless Steel)
Angle Bead	65	12 - 19	2700	SS A4 (Stainless Steel)
Angle Bead	65	12 - 19	2850	SS A4 (Stainless Steel)
Angle Bead	65	19	3000	SS A4 (Stainless Steel)
Angle Bead	70	19	2700	SS A4 (Stainless Steel)
Angle Bead	70	19	3000	SS A4 (Stainless Steel)
Angle Bead	75	19	3000	SS A4 (Stainless Steel)

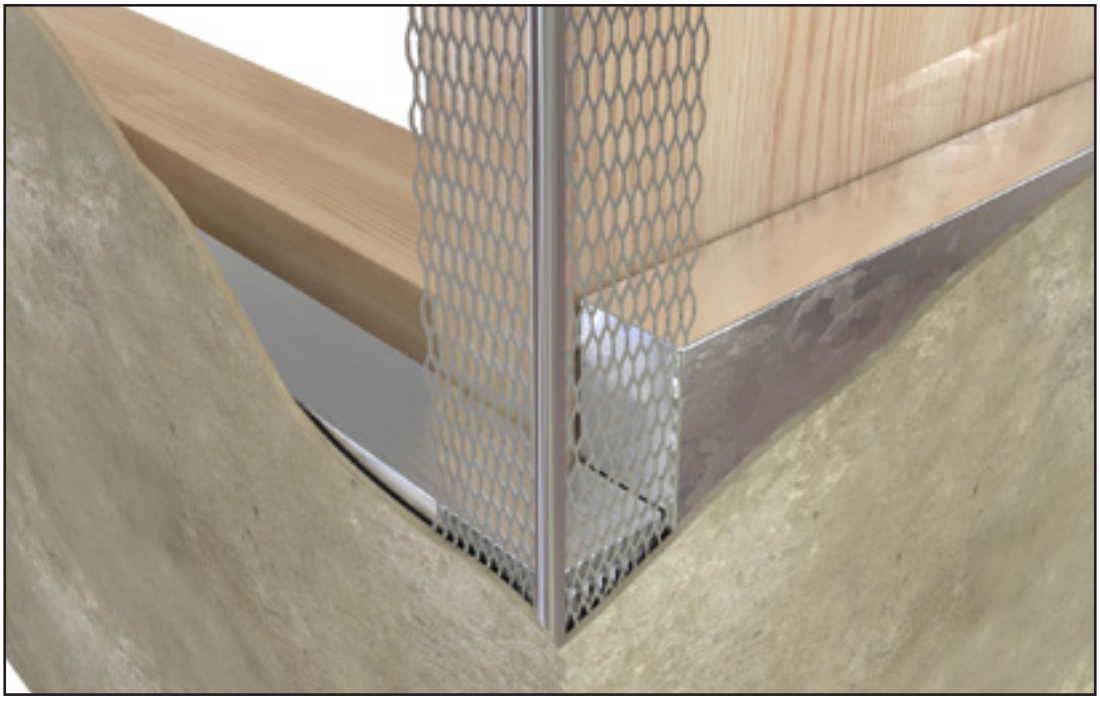
MICRO ANGLE BEAD

Micro angle beads are designed for thin coat plaster and are used at corners for protection. Micro angle beads are popular thin coat beads with fine mesh wings. Fix either by galvanized nails or using plaster dabs.



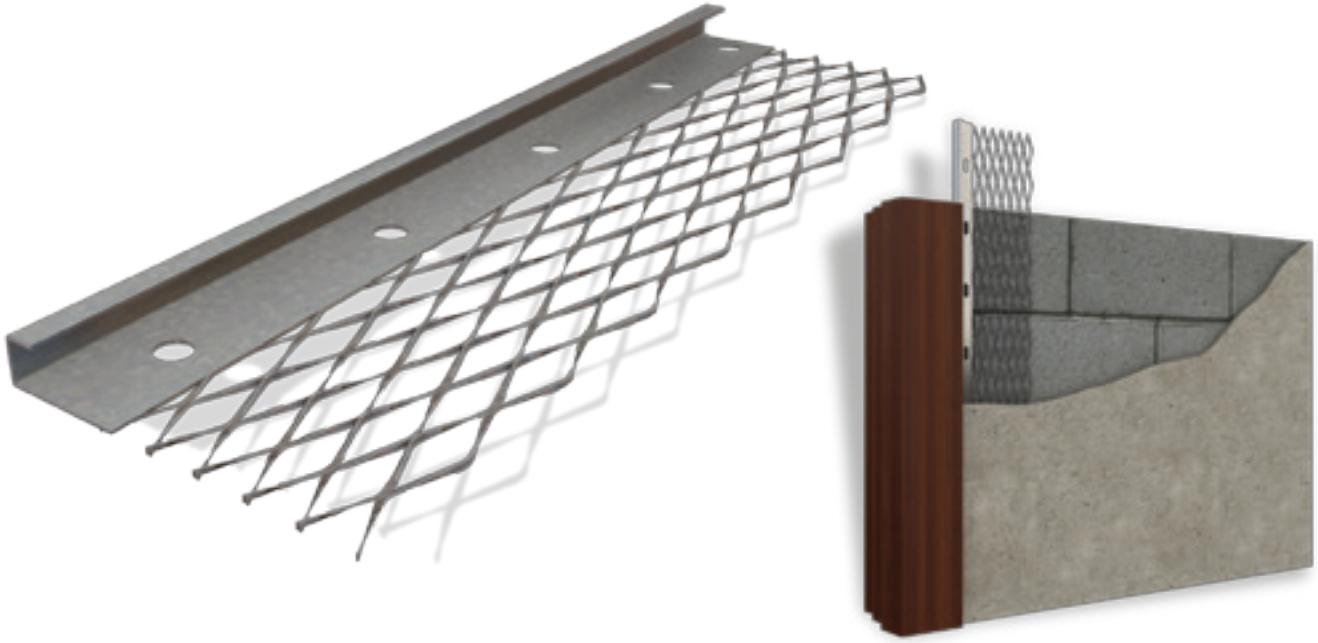
Description	Wing Width (mm)	Length (mm)	Material
Micro Angle Bead	40	2000	GI (Galvanized Steel)
Micro Angle Bead	40	3000	GI (Galvanized Steel)

Description	Wing Width (mm)	Length (mm)	Material
Micro Angle Bead	40	3000	SS A4 (Stainless Steel)



PLASTER STOP BEAD

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 stop bead protects the edge from damage and helps corner shrinkage cracks. Plaster stop bead can be used for many different applications and can also be less expensive compared to other construction methods.
The beads are designed with a ridge of nail holes to provide easy installation.
Plaster stop beads can be used in all types of buildings and constructions and all types of cement plastering works Plaster stop beads help in improving the quality of the building with reference to the abutments of the wall surfaces to other dissimilar surfaces. Plaster stop beads are used between wall surfaces and abutment of doors and window frames and in places wherever the plaster ends.



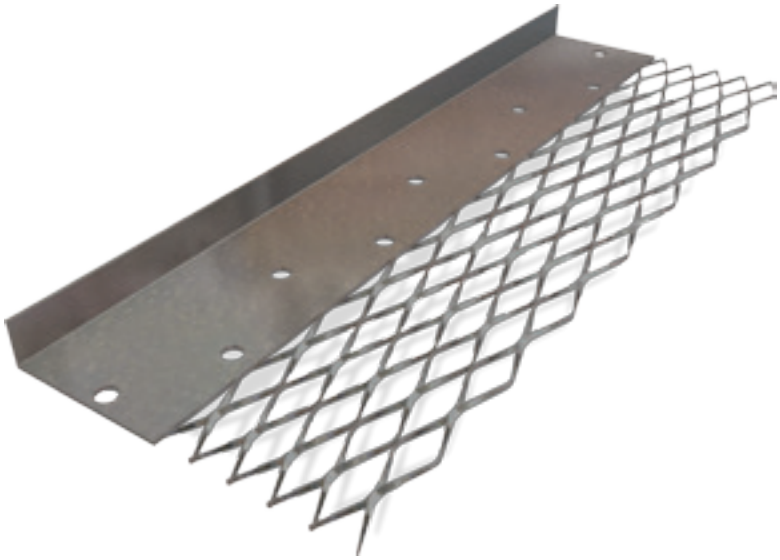
Description	Plaster Depth (mm)	Length (mm)	Material
Plaster Stop Bead	10	2850	GI (Galvanized Steel)
Plaster Stop Bead	10	3000	GI (Galvanized Steel)
Plaster Stop Bead	13	2700	GI (Galvanized Steel)
Plaster Stop Bead	13	3000	GI (Galvanized Steel)
Plaster Stop Bead	16	2700	GI (Galvanized Steel)
Plaster Stop Bead	16	3000	GI (Galvanized Steel)
Plaster Stop Bead	19	2850	GI (Galvanized Steel)
Plaster Stop Bead	19	3000	GI (Galvanized Steel)

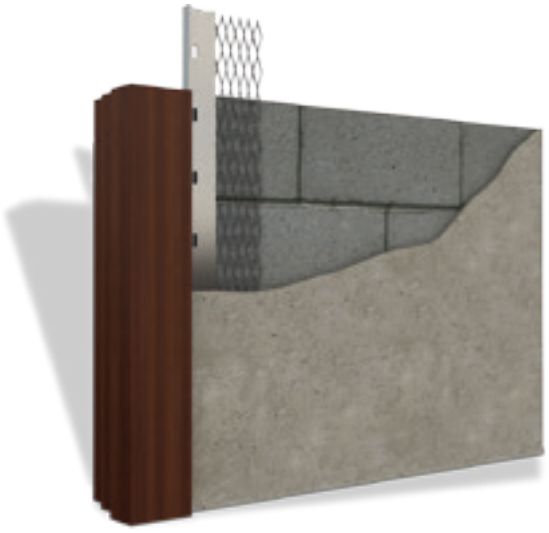
Description	Plaster Depth (mm)	Length (mm)	Material
Plaster Stop Bead	13	2700	SS A4 (Stainless Steel)
Plaster Stop Bead	13	3000	SS A4 (Stainless Steel)
Plaster Stop Bead	16	2850	SS A4 (Stainless Steel)
Plaster Stop Bead	16	3000	SS A4 (Stainless Steel)
Plaster Stop Bead	19	3000	SS A4 (Stainless Steel)

MICRO PLASTER STOP BEAD

Micro plaster stops are designed for thin coat edge protection at openings. They provide abutment of plastered areas of other wall finishes. Micro plaster stops provide efficient keying and excellent finishes.

Micro plaster stops make neat, flush frames for windows and other openings.

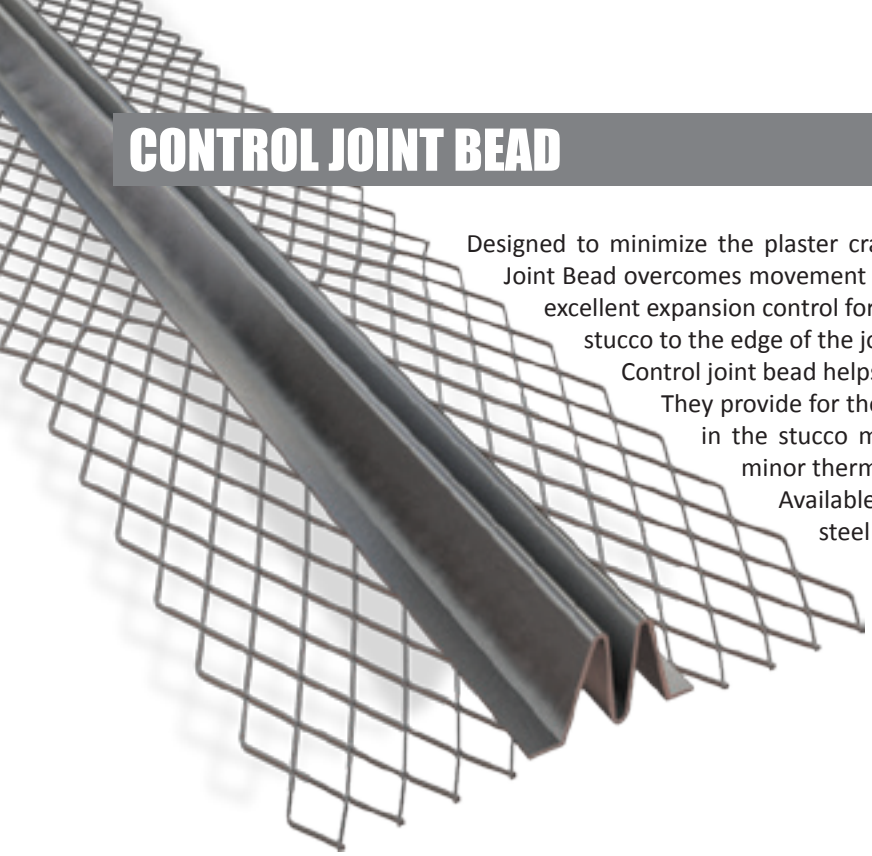




Description	Plaster Depth (mm)	Length (mm)	Material
Micro Plaster Stop Bead	3	2700	GI (Galvanized Steel)
Micro Plaster Stop Bead	3	2850	GI (Galvanized Steel)
Micro Plaster Stop Bead	3	2900	GI (Galvanized Steel)
Micro Plaster Stop Bead	3	3000	GI (Galvanized Steel)
Micro Plaster Stop Bead	6	2700	GI (Galvanized Steel)
Micro Plaster Stop Bead	6	2850	GI (Galvanized Steel)
Micro Plaster Stop Bead	6	2900	GI (Galvanized Steel)
Micro Plaster Stop Bead	6	3000	GI (Galvanized Steel)

Description	Plaster Depth (mm)	Length (mm)	Material
Micro Plaster Stop Bead	3	2700	SS A4 (Stainless Steel)
Micro Plaster Stop Bead	3	2850	SS A4 (Stainless Steel)
Micro Plaster Stop Bead	3	2900	SS A4 (Stainless Steel)
Micro Plaster Stop Bead	3	3000	SS A4 (Stainless Steel)
Micro Plaster Stop Bead	6	2700	SS A4 (Stainless Steel)
Micro Plaster Stop Bead	6	2850	SS A4 (Stainless Steel)
Micro Plaster Stop Bead	6	2900	SS A4 (Stainless Steel)
Micro Plaster Stop Bead	6	3000	SS A4 (Stainless Steel)

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.

Control joint bead helps reducing stucco separation at the edge of the joint.

They provide for the basic expansion and contraction that can be expected in the stucco membrane, such as initial shrinkage during curing and minor thermal expansion and contraction.

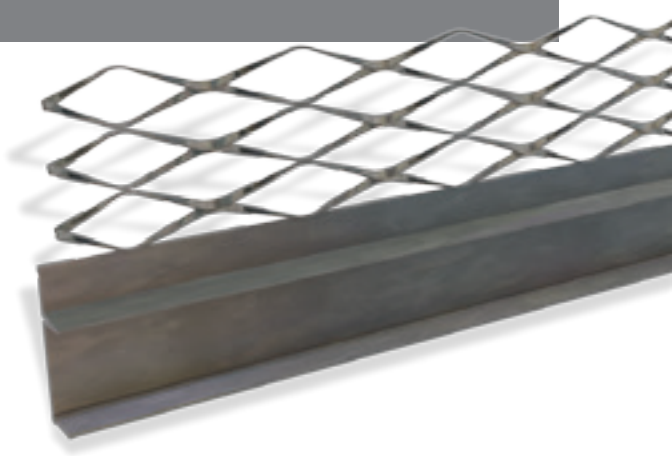
Available in galvanized finish for internal use and in stainless steel for external use.

Description	Plaster Depth (mm)	Length (mm)	Material
Control Joint Bead	13	3000	GI (Galvanized Steel)
Control Joint Bead	16	3000	GI (Galvanized Steel)
Control Joint Bead	19	3000	GI (Galvanized Steel)

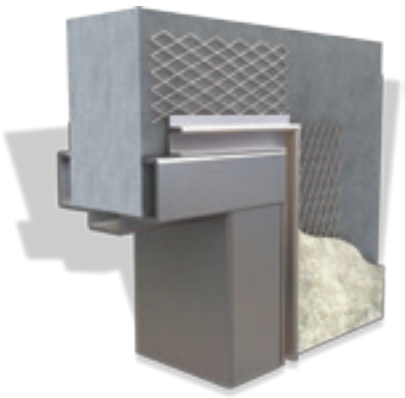
Description	Plaster Depth (mm)	Length (mm)	Material
Control Joint Bead	13	3000	SS A4 (Stainless Steel)
Control Joint Bead	16	3000	SS A4 (Stainless Steel)
Control Joint Bead	19	3000	SS A4 (Stainless Steel)

ARCHITRAVE BEAD

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



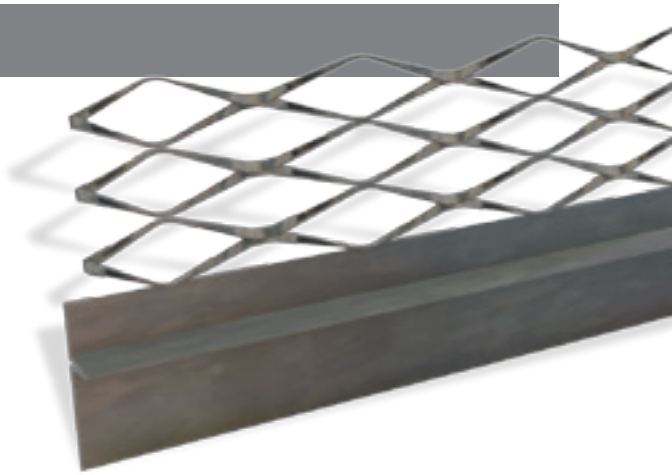
Description	Plaster Depth (mm)	Length (mm)	Material
Architrave Bead	10	3000	GI (Galvanized Steel)
Architrave Bead	13	3000	GI (Galvanized Steel)
Architrave Bead	16	3000	GI (Galvanized Steel)
Architrave Bead	19	3000	GI (Galvanized Steel)



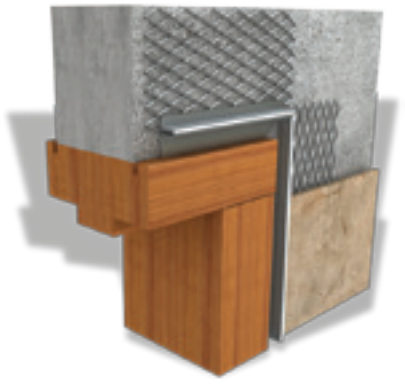
Description	Plaster Depth (mm)	Length (mm)	Material
Architrave Bead	13	3000	SS A4 (Stainless Steel)
Architrave Bead	13	3000	SS A4 (Stainless Steel)
Architrave Bead	16	3000	SS A4 (Stainless Steel)
Architrave Bead	19	3000	SS A4 (Stainless Steel)

ARCHITRAVE BEAD WITHOUT FLANGE

Mainly used for decorative purposes to give a shadow between different walls finishes.



Description	Plaster Depth (mm)	Length (mm)	Material
Architrave Bead	10	3000	GI (Galvanized Steel)
Architrave Bead	13	3000	GI (Galvanized Steel)
Architrave Bead	16	3000	GI (Galvanized Steel)
Architrave Bead	19	3000	GI (Galvanized Steel)



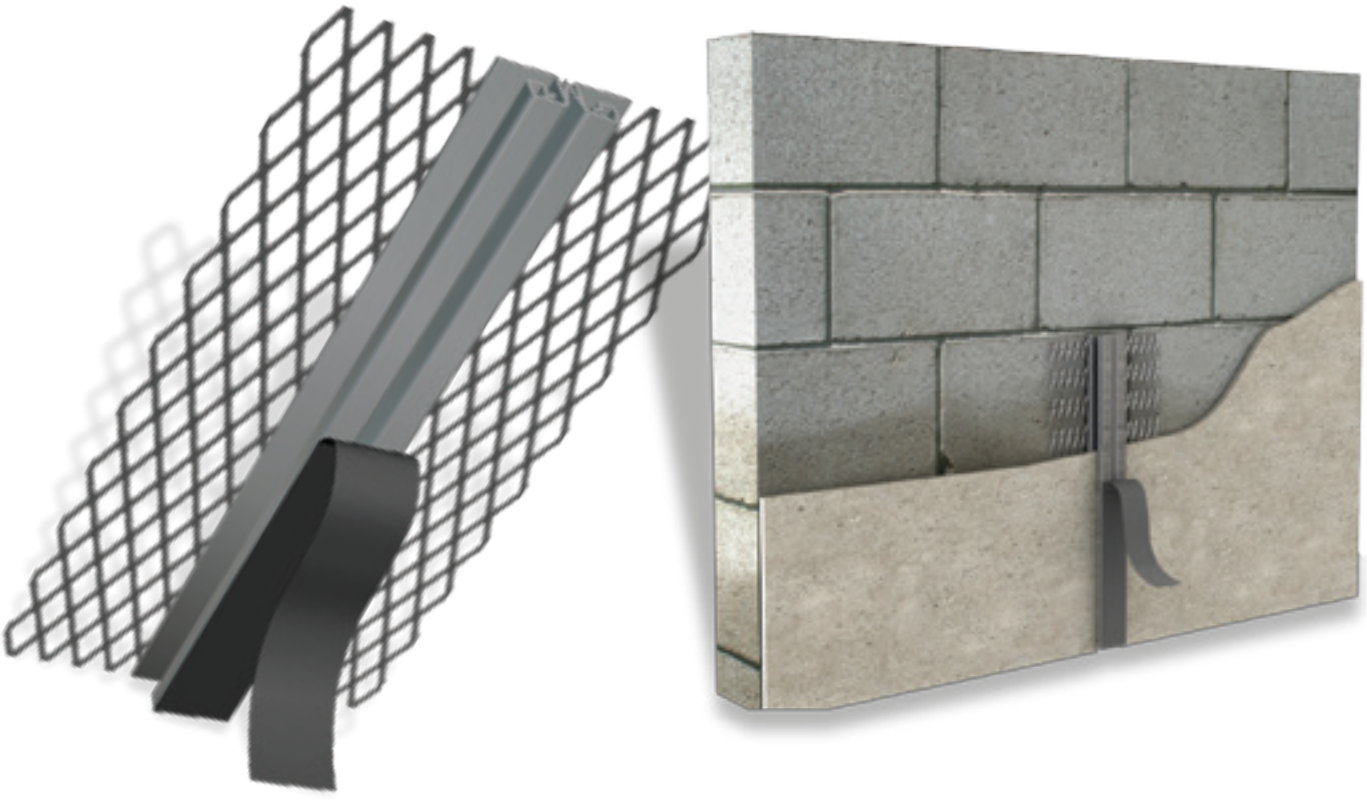
Description	Plaster Depth (mm)	Length (mm)	Material
Architrave Bead	13	3000	SS A4 (Stainless Steel)
Architrave Bead	13	3000	SS A4 (Stainless Steel)
Architrave Bead	16	3000	SS A4 (Stainless Steel)
Architrave Bead	19	3000	SS A4 (Stainless Steel)

MOVEMENT BEAD

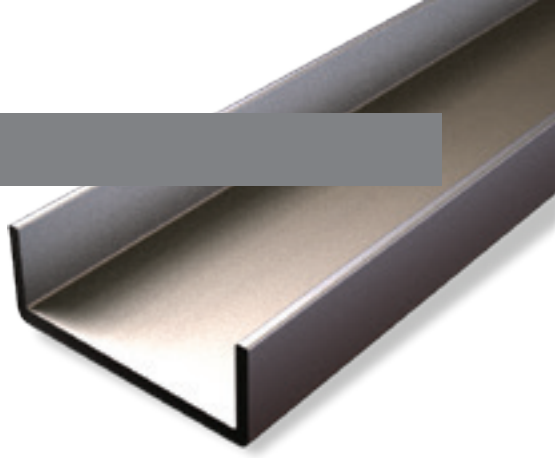
Movement Beads are used to relieve the stress and strain in large plaster areas of wall and ceiling stucco areas and to allow for movement between adjoining surface finishes.
Movement Beads overcome movement tolerance in plaster and render finishes and minimize the cracking in plaster. Movement Beads act as stop barriers when a change in finish is required.
The purpose of the movement joint is to assure the proper plaster or stucco thickness also.
Movement Beads are used in all types of building construction wherever expansion joints are present, for all types and kinds of bricks and reinforced concrete.
It helps in improving the quality of the building with respect to the openings that are invariably created because of the space provided for expansion.

Description	Plaster Depth (mm)	Length (mm)	Material
Movement Bead	19	3000	GI (Galvanized Steel)
Movement Bead	19	3000	GI (Galvanized Steel)
Movement Bead	19	3000	GI (Galvanized Steel)
Movement Bead	19	3000	GI (Galvanized Steel)

Description	Plaster Depth (mm)	Length (mm)	Material
Movement Bead	19	3000	SS A4 (Stainless Steel)
Movement Bead	19	3000	SS A4 (Stainless Steel)
Movement Bead	19	3000	SS A4 (Stainless Steel)
Movement Bead	19	3000	SS A4 (Stainless Steel)



ALUMINUM CHANNEL



The Aluminum Channel is a versatile product, commonly used for groove making; a decorative purpose for plaster finishes.

Description	Size (mm)	Length (mm)	Thickness (mm)	Material
Aluminum Channel	8x8x8	6000	1.5	Aluminum
Aluminum Channel	10x10x10	6000	1.5	Aluminum
Aluminum Channel	10x20x10	6000	1.5	Aluminum
Aluminum Channel	12.5x23x12.5	6000	1.5	Aluminum
Aluminum Channel	15x15x15	6000	1.5	Aluminum
Aluminum Channel	15x20x15	6000	1.5	Aluminum
Aluminum Channel	20x20x20	6000	1.5	Aluminum
Aluminum Channel	25x25x25	6000	1.5	Aluminum

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. Corner Mesh lathes helps the formation of proper plastering.

Description	Length of wings (mm)	Length (mm)	Material
Corner Mesh	50	3000	GI (Galvanized Steel)
Corner Mesh	75	3000	GI (Galvanized Steel)
Corner Mesh	100	3000	GI (Galvanized Steel)

Description	Length of wings (mm)	Length (mm)	Material
Corner Mesh	50	3000	SS A4 (Stainless Steel)
Corner Mesh	75	3000	SS A4 (Stainless Steel)
Corner Mesh	100	3000	SS A4 (Stainless Steel)

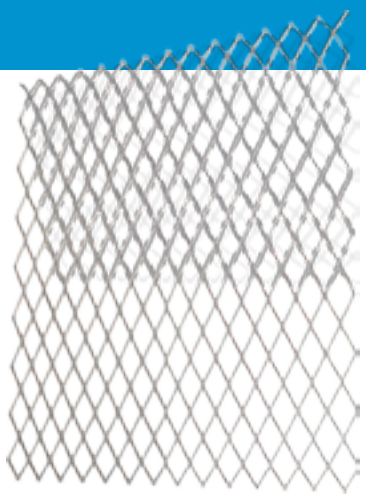
STRIP MESH

Strip Mesh Lathes are used along stress lines where cracking is likely. Strip mesh provides reinforcement to the plaster to prevent crack over joints of different materials.

Description	Strip Mesh Width (mm)	Length (mm)	Weight (kg/m²)	Material
Strip Mesh	152	2440	0.75	GI (Galvanized Steel)
Strip Mesh	152	2440	0.80	GI (Galvanized Steel)
Strip Mesh	102	2440	0.75	GI (Galvanized Steel)
Strip Mesh	102	2440	0.80	GI (Galvanized Steel)
Strip Mesh	102	2440	1.91	GI (Galvanized Steel)
Strip Mesh	152	2500	1.92	GI (Galvanized Steel)
Strip Mesh	152	3000	1.10	GI (Galvanized Steel)
Strip Mesh	203	2440	0.79	GI (Galvanized Steel)
Strip Mesh	203	2440	0.90	GI (Galvanized Steel)
Strip Mesh	203	2440	1.10	GI (Galvanized Steel)
Strip Mesh	203	2440	1.60	GI (Galvanized Steel)
Strip Mesh	203	3000	1.10	GI (Galvanized Steel)

METAL SHEET LATH

Sheet lath is produced as a key for plaster when applied on suspended ceiling and walls. Sheet lath is used for encasing steel column and beams, assisting in the protection from fire. Sheet lath is used to reinforce plaster between dissimilar areas and at crack-prone areas adjacent to openings.



Description	Strip Mesh Width (mm)	Length (mm)	Weight (kg/m²)	Material
Metal Sheet Lath	500	2440	0.75	GI (Galvanized Steel)
Metal Sheet Lath	610	2440	0.9	GI (Galvanized Steel)
Metal Sheet Lath	610	2440	1.22	GI (Galvanized Steel)
Metal Sheet Lath	610	2440	1.60	GI (Galvanized Steel)
Metal Sheet Lath	610	2440	1.85	GI (Galvanized Steel)
Metal Sheet Lath	610	2440	1.90	GI (Galvanized Steel)
Metal Sheet Lath	610	2440	2.84	GI (Galvanized Steel)
Metal Sheet Lath	150	2440	1.10	GI (Galvanized Steel)

COIL LATH

An easy to fix lath, provides a secure key for plaster and render applications as well as offering effective joint and crack reinforcement.

Description	Coil Lath Width (mm)	Length (mm)	Material
Coil Lath	102	5000	GI (Galvanized Steel)
Coil Lath	152	5000	GI (Galvanized Steel)
Coil Lath	203	5000	GI (Galvanized Steel)
Coil Lath	305	5000	GI (Galvanized Steel)

Description	Coil Lath Width (mm)	Length (mm)	Material
Coil Lath	102	5000	SS A4 (Stainless Steel)
Coil Lath	152	5000	SS A4 (Stainless Steel)
Coil Lath	203	5000	SS A4 (Stainless Steel)
Coil Lath	305	5000	SS A4 (Stainless Steel)

METAL RIB LATH

Rib lathes are expanded metal lathes stiffened with longitudinal ribs. The furring design of the mesh provides efficient background plaster for construction of partition, suspend ceiling and refurbishment works. Rib lath is ideal for refurbishing damaged or old masonry walls, when a key for rendering is not certain due to disintegration or softening of the wall face.

Installation:

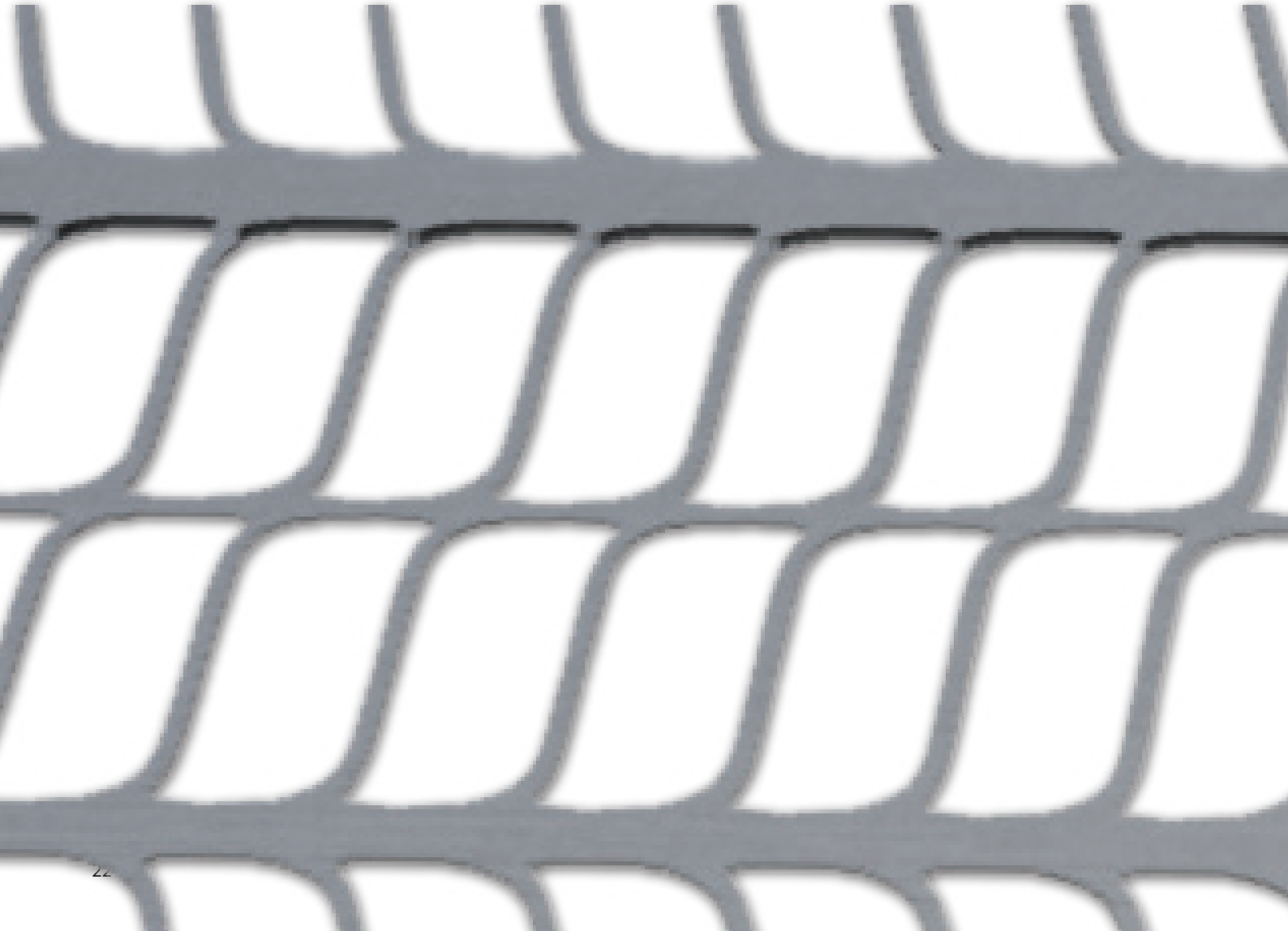
Rib lath should be fixed with apexes of ribs against the wall, edge ribs of sheet nesting into each other should be wire-tied every 150mm and ends fixing should be used at sufficient intervals to hold the lath firmly in position.

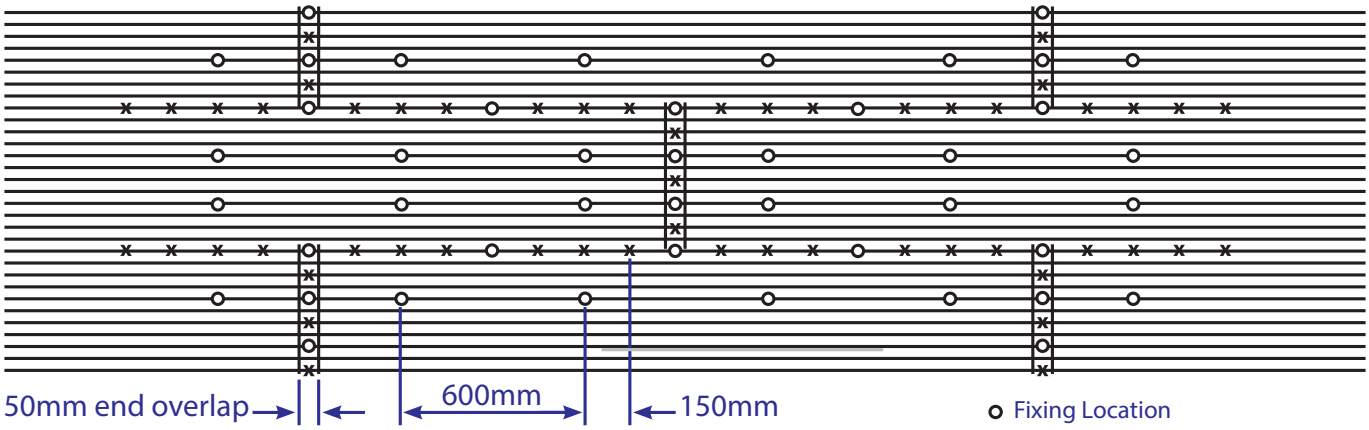
Fixing of Rib lath sheets:
Rib lath is fixed so that the tip of the rib is placed against the supporting background. The rib of the sheet should run at right angles to any supports. Ensure that sheets are overlapped by a minimum of 50mm end to end and by 25mm width ways and that the ribs are nestled together.

Timber Support:
Rib lath is fixed at each rib to timber supports using plasterers' nails or staples. Ensure that compatible corrosion resistant fixings are used, i.e. Do not use galvanized fixings for stainless steel.

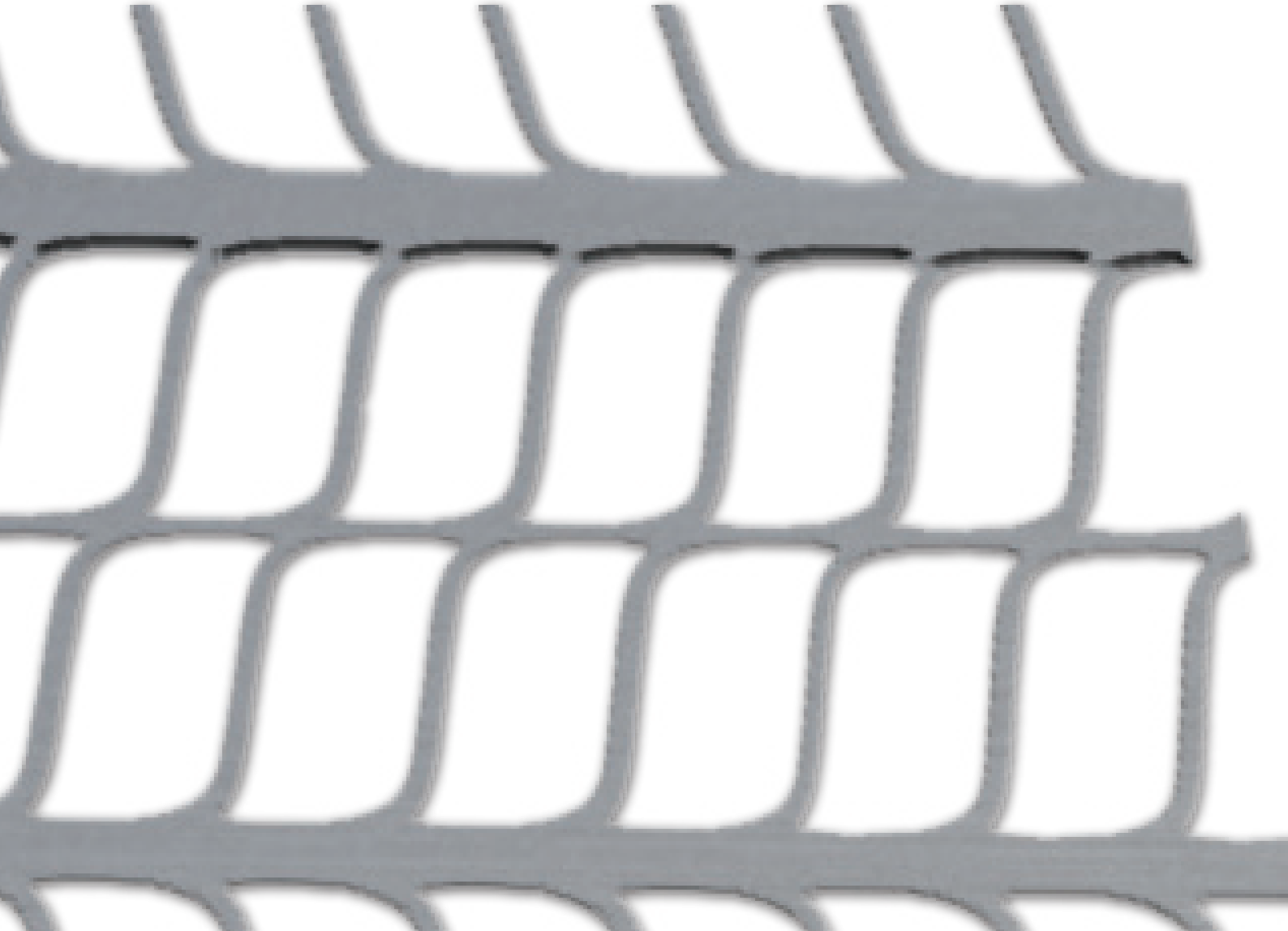
Metal support:
Rib lath is fixed at each rib to metal support using 1.63mm galvanized or stainless steel tying wire. When joining Rib lath sheets overlap the edge ribs and tie the edges with 1.22mm tying wire at 150mm centers.

Solid Background:
Rib lath can be fixed to a solid background using a suitable fixing which holds the ribs firmly against the background. Where sheets are installed vertically, fixings should be positioned through all ribs at 600mm centers to ensure adequate stability.





Reference	Weight (kg/m²)	Rib Height (mm)	Size (mm)	Material
RBL 148 - GS	1.48	10	2500 x 700	Galvanized
RBL 184 - GS	1.84	10	2500 x 700	Galvanized
RBL 222 - GS	2.22	10	2500 x 700	Galvanized
RBL 148 - SS	1.48	10	2500 x 700	Stainless Steel
RBL 184 - SS	1.84	10	2500 x 700	Stainless Steel
RBL 222 - SS	2.22	10	2500 x 700	Stainless Steel



HY-RIB LATH

Manufactured from Pre-galvanized steel to BSEN 10327.
Hy Rib is available using stainless steel to BSEN 10088-2 type 1 .4301 .

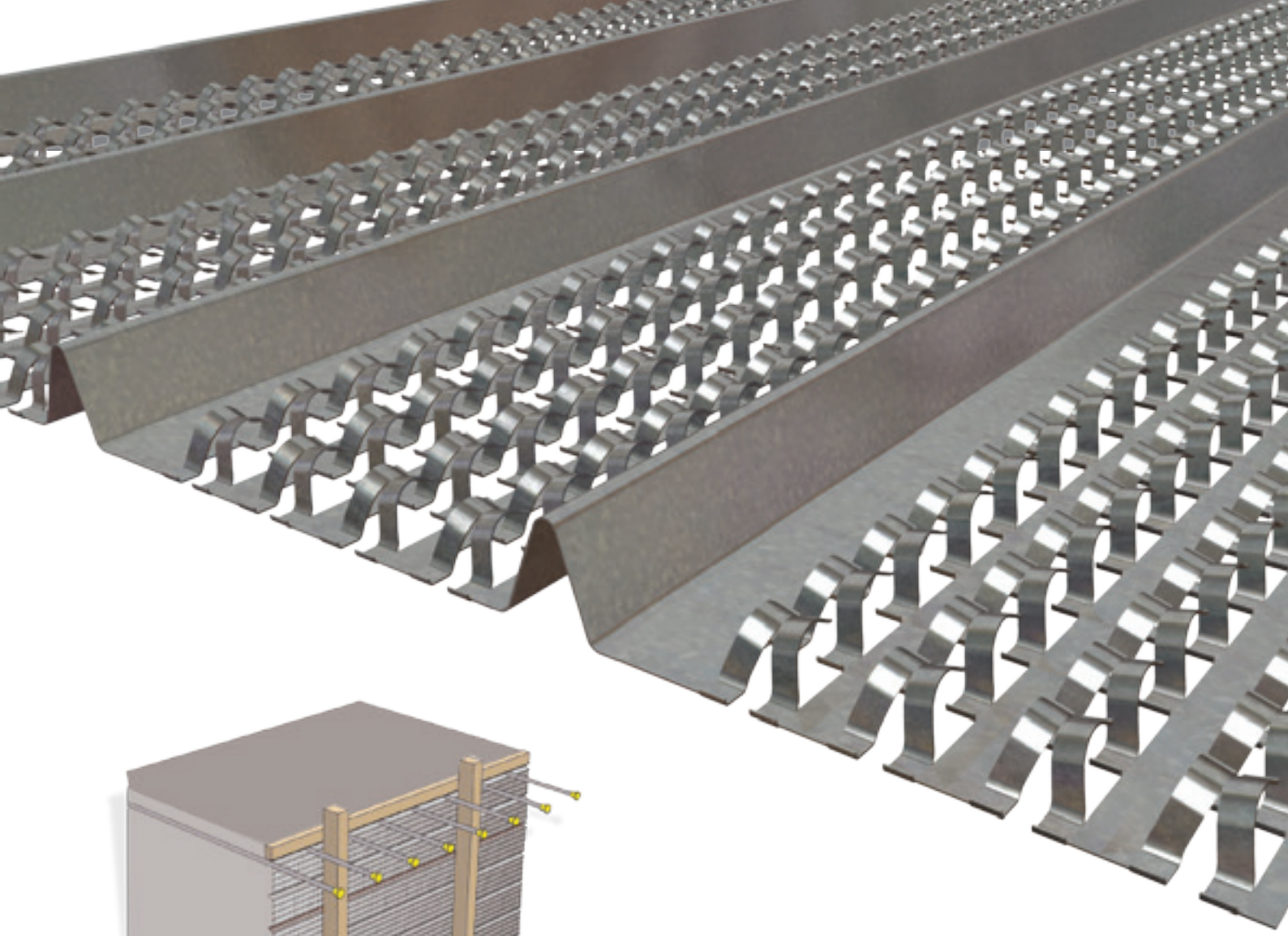
The profile of Hy Rib open mesh in combination with its ribs provide an inherently stiff sheet along its length.

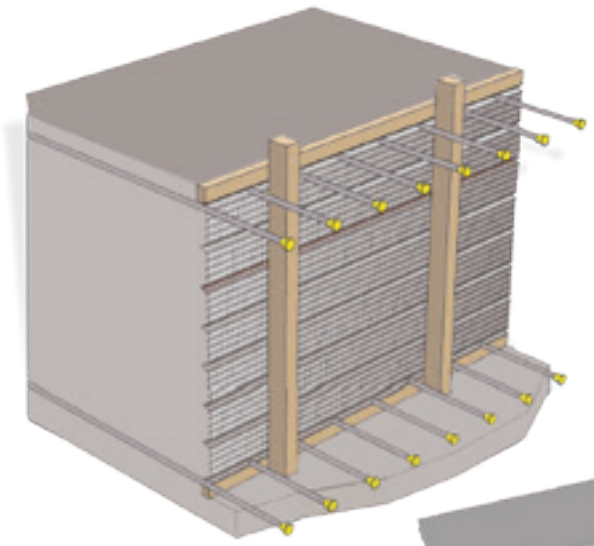
It can be used for flat and curved surfaces.

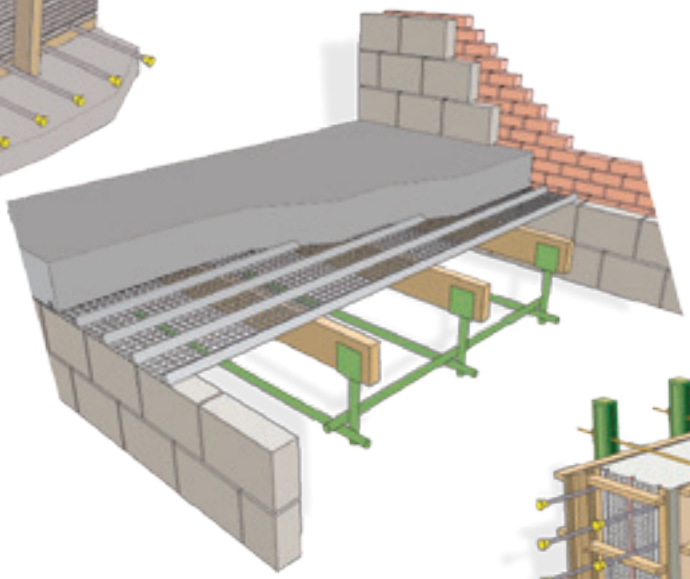
Depth of joint (D)	Concrete Pressure		Clear Distance Between Supports (A) for Hy-Rib		
	Ciria 108	Assumed for Hy-Rib	2411	2611	2811
mm	kN/m²	kN/m²	mm	mm	mm
250	6.25	3.2	1250	1025	950
500	12.5	6.3	900	725	675
750	18.75	9.5	725	600	550
1000	25.0	12.7	625	500	475
1250	31.25	15.8	575	450	425
1500	37.5	19.0	525	425	400
2000	50.0	25.3	450	375	350
2500	62.5	31.7	400	325	300
3000	75.0	38.0	375	300	275

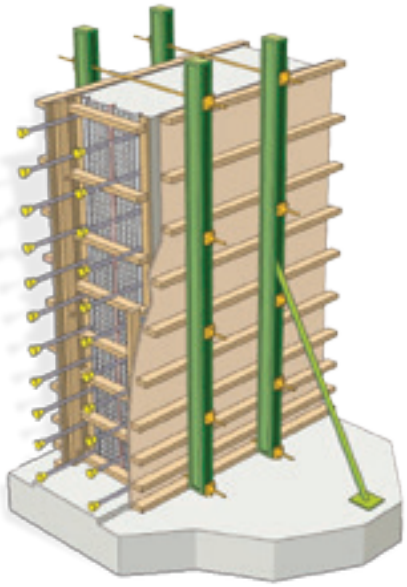
Reference	Rib Height (mm)	Material	Length (mm)	Width (mm)	Thickness (mm)	Weight (kg/sqm)
HRB 16 - GS	16	Galvanized	2500	450	0.5	3.25/3.39
HRB 18 - GS	18	Galvanized	2500	450	0.5	4.00/4.86

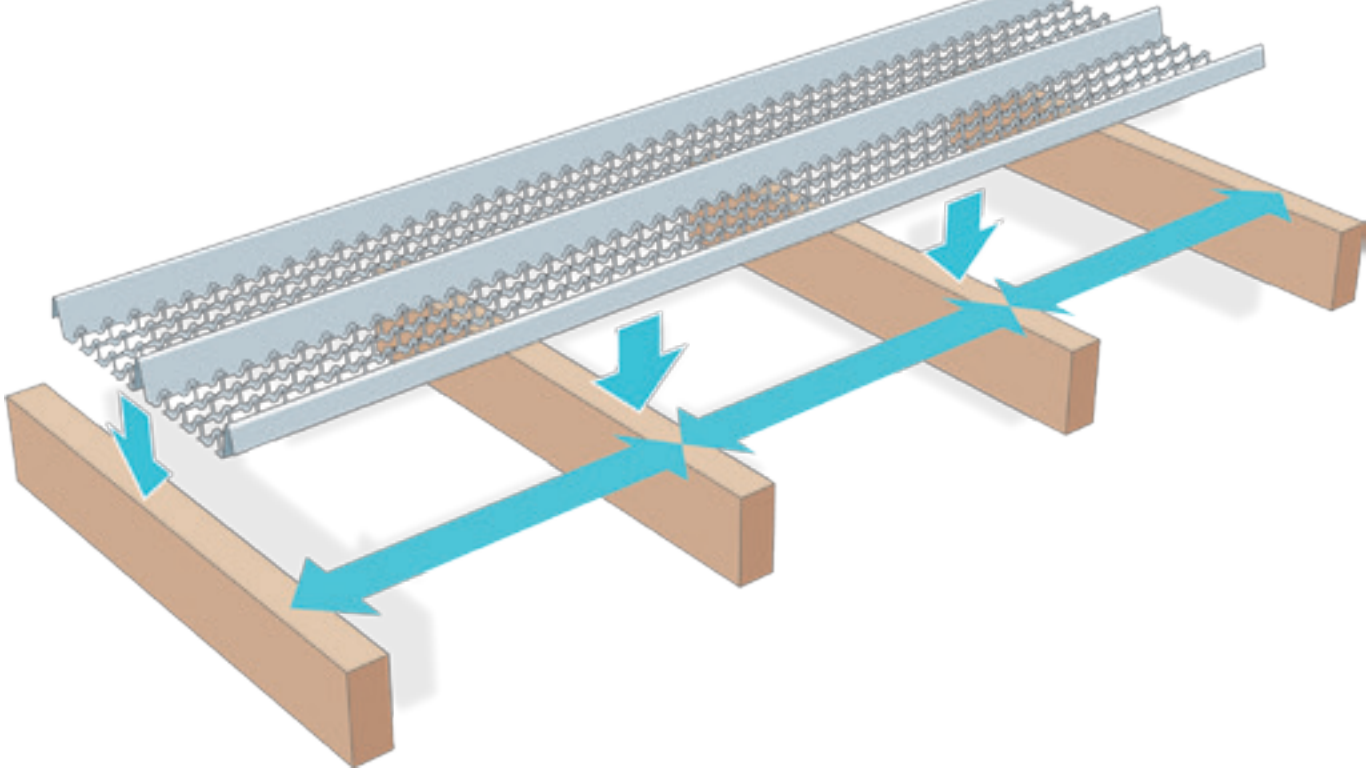
Thickness (mm)	Width (mm)	Rib Height (mm)	Rib Distance (mm)	Length
0.25	445	13	89	According to Order
0.3	445	13	89	According to Order
0.3	445	20.5	89	According to Order
0.35	445	13	89	According to Order
0.35	445	20.5	89	According to Order
0.4	445	13	89	According to Order
0.4	445	20.5	89	According to Order
0.5	445	20.5	89	According to Order











Hy Rib: Fields Of Application and Advantage

Application in concrete construction
- For expansion joints as lost form.
- For flat spread even or moulded construction units as lost form.

Advantages in concrete construction
- Perfect bonding of the concreting sections without any further treatment of the expansion joint.
- Reduction of the concrete pressure during the concerting process.
- Minimising of hollow spaces and visual supervision of the process possible.
- Hy Rib reduces the risk of trapped air and voids within the concrete.
- The range of narrower sheet widths improves site productivity and minimises wastage.

Application with plastering works
- For wire lattice construction with spans upto 1200mm.

Advantages with plastering works
- High Stability.
- Especially economical with great spans.

Hy Rib Processing Placing:
- Ribs must not be damaged or deformed when fastened.
- The sheets are placed overlapping rib in rib.
- With concrete works the rib back of the metal mesh always point to the first concreting section.
The open ribs on the other side ensu re reliable bonding to the second concreting section.

Reference	Weight (kg/sqm)	Rib Depth (mm)	Width (mm)	Length (m)	Material
HR 3	3.39	21	445	2 up to 5	Galvanized
HR 4	4.86	21	445	2 up to 5	Galvanized
HR 6	4.86	21	445	2 up to 5	Galvanized

The connection reinforcement (5) required is guided through the metal mesh. For this purpose Hy Rib is incised with sheets sheares or RSM special cam shears. Rib cutting in should be avoided if possible.

Joint bands can be mounted is placed between two Hy Rib strips. For this purpose Hy Rib is incised with sheet shears or RSM special cam shears. The stiffening wood beams are provided with cut outs for the joint band.

Hy Rib is nailed to angular or profiled stiffening wood beams (2).
Ribs should not be damaged when they are deformed The closed ribs points towards the first concreting section, since at this point the ribs are exposed to the greater pressure. The ribs are placed cross to the stiffening wood beams.

- Hy Rib requires the same concrete covering as reinforcing steel. In order to maintain the prescribed concrete covering timber rails (3) are nailed to the upper and lower sides of the construction unit as range spacers and to the stiffening woods beams.

- The stiffening wood beams (2) themselves are nailed to the sheathing and held by wooden ledges (4), which are propped against the existing reinforcement.

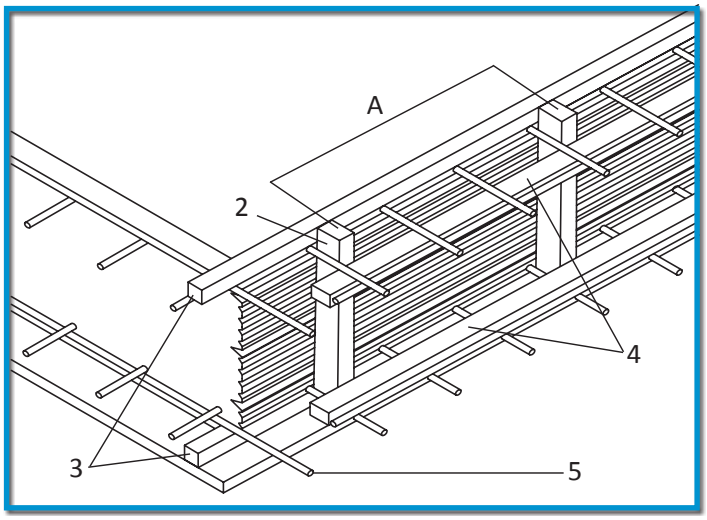


Fig 1 Straight expansion joint with Hy-Rib

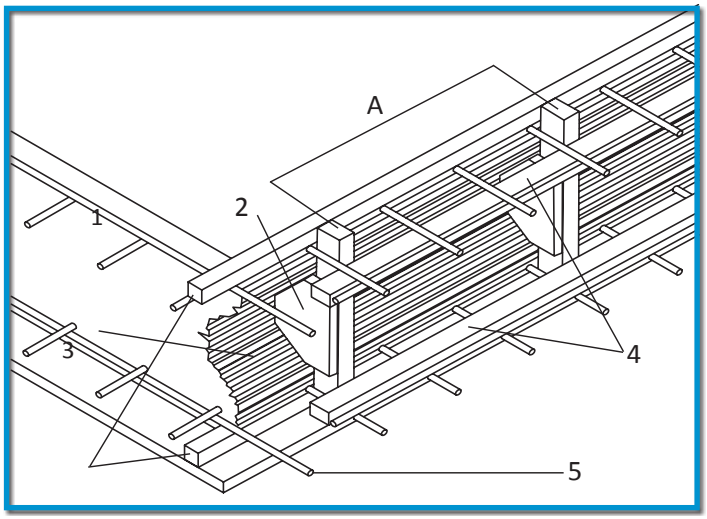


Fig 2 Profiled expansion joint with Hy-Rib

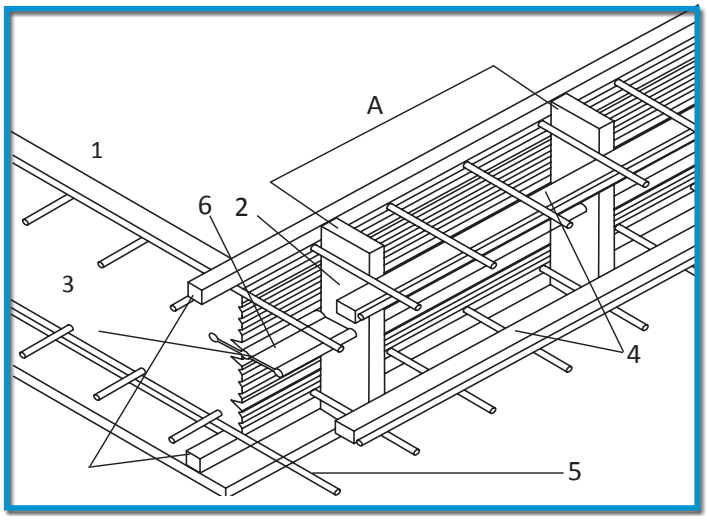
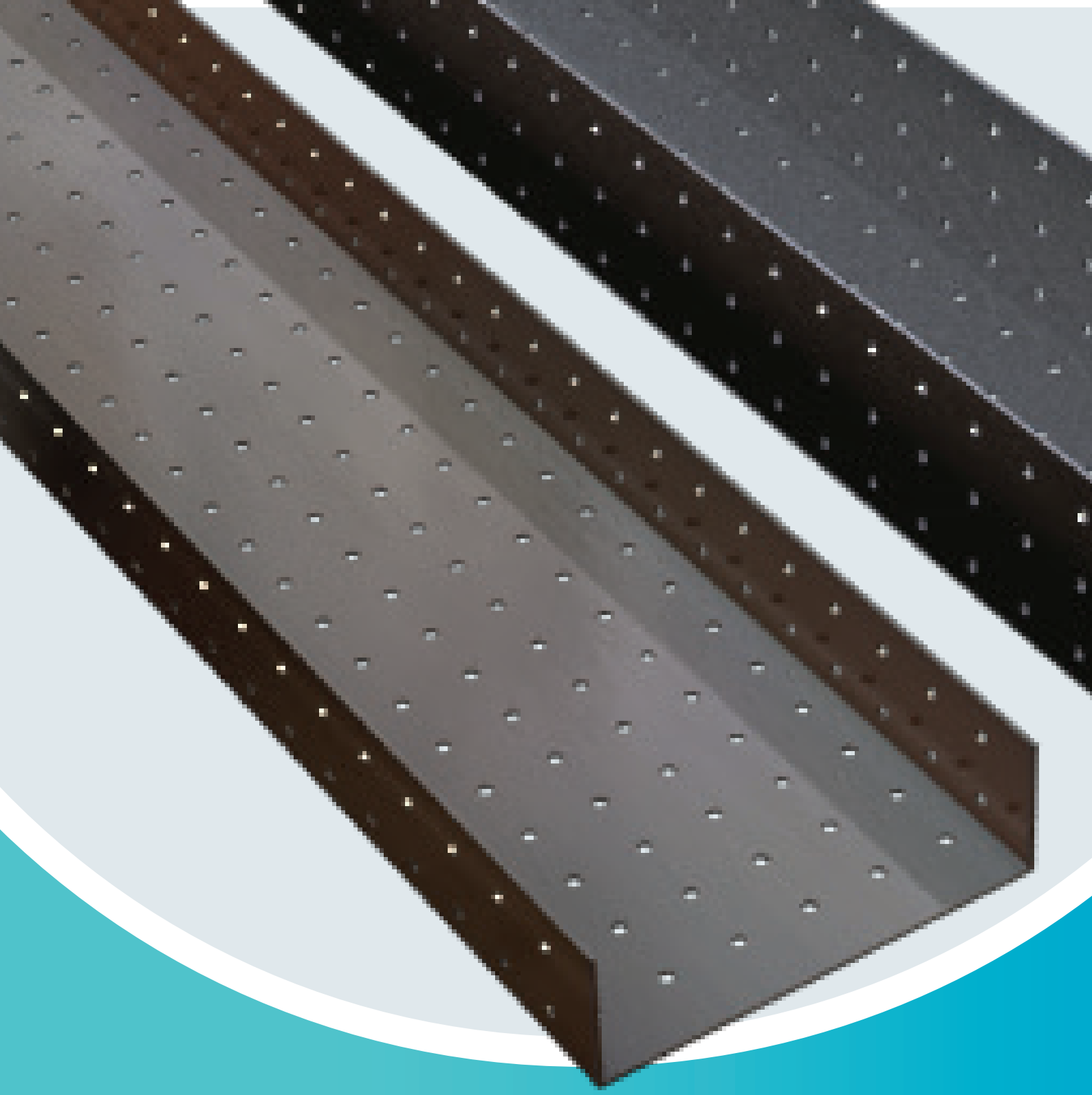


Fig 3 Expansion joint with Hy-Rib and joint band



STEEL LINTELS

STEEL LINTELS

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 in Stuttgart, Germany.

SFSP manufactures Steel Lintel in accordance with:
- BS EN 845-2:2013+A1:2016

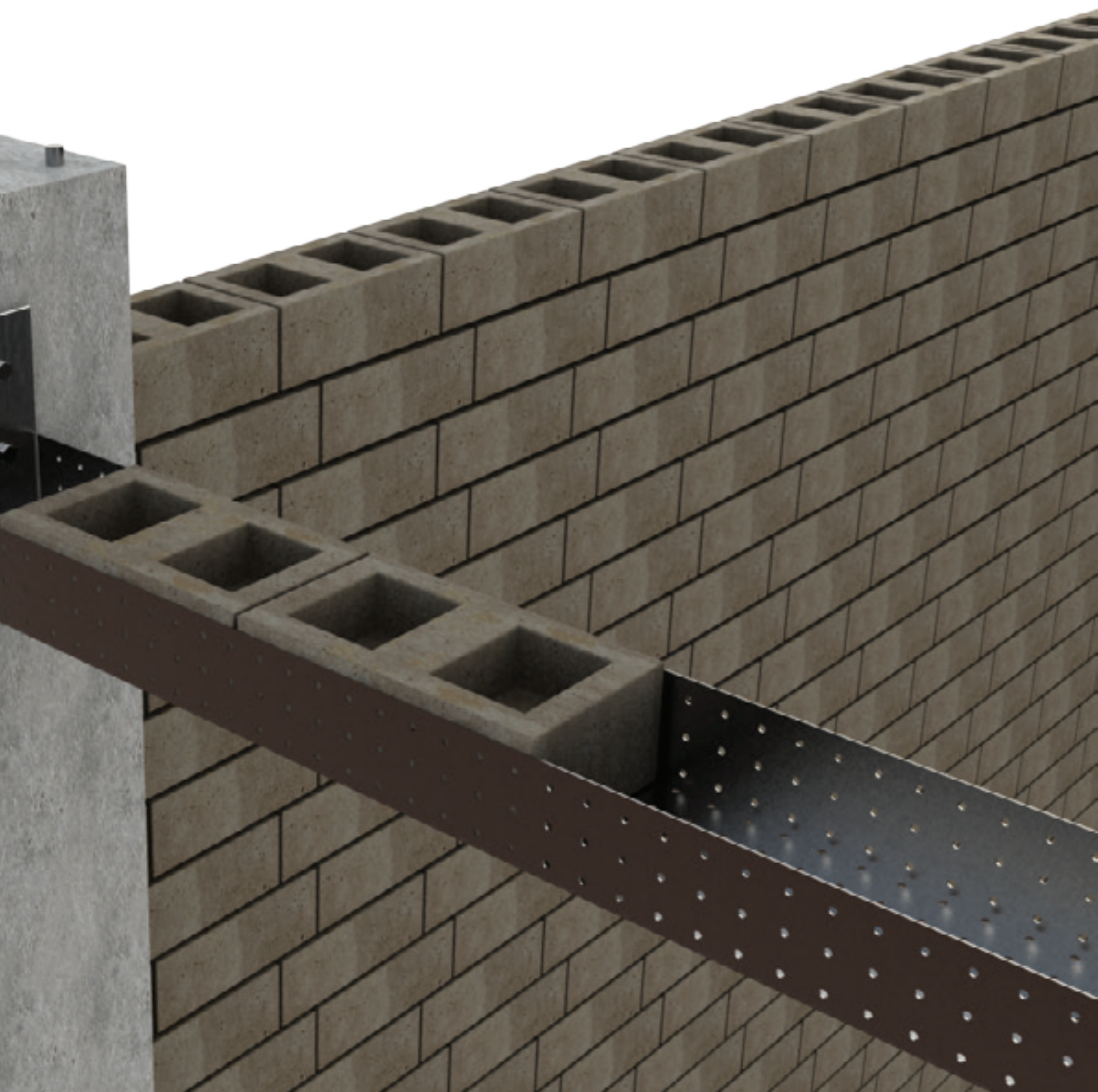
Relevant Standards
- BS 5977 Part 2:1983

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

MATERIAL

- Hot rolled steel S235JR as per EN 10025 / ASTM A-1011 CS Type B (formerly ASTM A569 or ASTM A570)

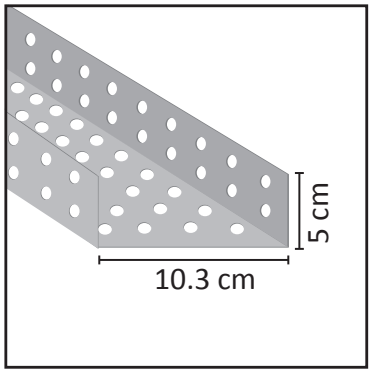
- Cold rolled steel DC01 as per EN 10130:2006 / ASTM A1008 CS Type B (formerly ASTM A-366)



CHANNEL LINTELS

UML 100/50 Safe

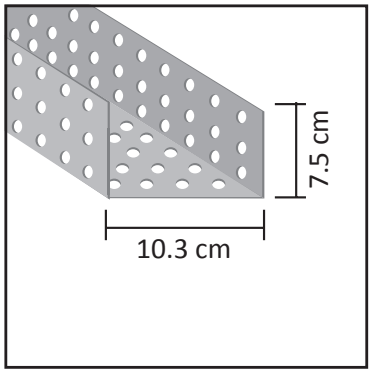
Working Load Tables



Lintel Code	UML 100/50-2	UML 100/50-3	UML 100/50-4
Sheet Thickness (mm)	2.0	3.0	4.0
Length in meters	Uniformly Distributed Loads (kN/m)		
0.90 - 1.20	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

UML 100/75

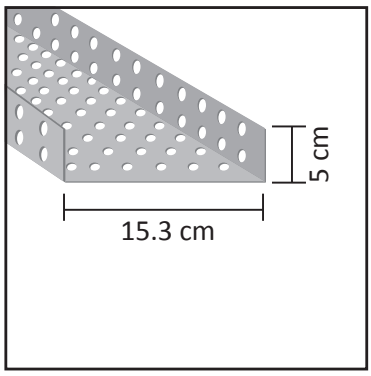
Working Load Tables



Lintel Code	UML 100/75-4
Sheet Thickness (mm)	4.0
Length in meters	Uniformly Distributed Loads (kN/m)
0.90 - 1.20	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

UML 150/50

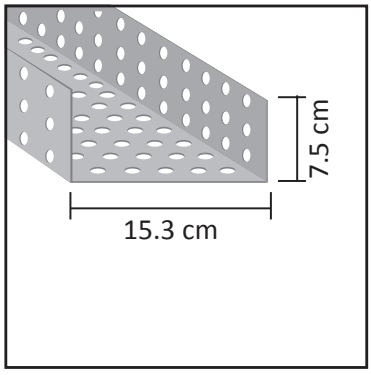
Working Load Tables



Lintel Code	UML 150/50-2	UML 150/50-3	UML 150/50-4
Sheet Thickness (mm)	2.0	3.0	4.0
Length in meters	Uniformly Distributed Loads (kN/m)		
0.90 - 1.20	0.44	1.5	2.65
1.30 - 1.50	0.28	1.0	1.76
1.60 - 1.80	0.20	0.72	1.24
1.90 - 2.10	0.14	0.55	0.74
2.20 - 2.40	0.10	0.35	0.47

UML 150/75

Working Load Tables

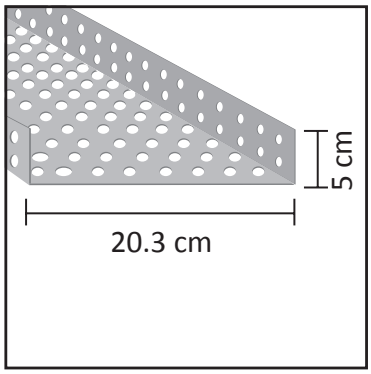


Lintel Code	UML 150/75-4
Sheet Thickness (mm)	4.0
Length in meters	Uniformly Distributed Loads (kN/m)
0.90 - 1.20	3.60
1.30 - 1.50	2.40
1.60 - 1.80	1.73
1.90 - 2.10	1.28
2.20 - 2.40	0.98

Safety Factor is at 135%

UML 200/50

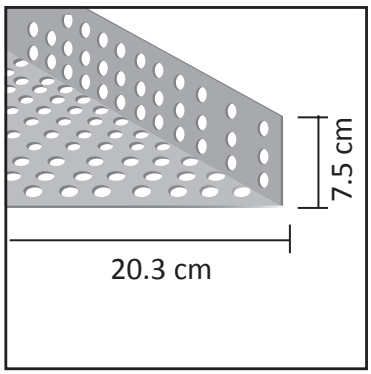
Working Load Tables



Lintel Code	UML 200/50-2	UML 200/50-3	UML 200/50-4
Sheet Thickness (mm)	2.0	3.0	4.0
Length in meters	Uniformly Distributed Loads (kN/m)		
0.90 - 1.20	0.42	1.50	2.70
1.30 - 1.50	0.28	1.0	1.80
1.60 - 1.80	0.19	0.70	1.25
1.90 - 2.10	0.13	0.52	0.78
2.20 - 2.40	0.09	0.40	0.49

UML 200/75

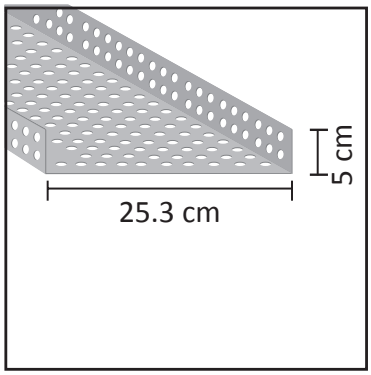
Working Load Tables



Lintel Code	UML 200/75-4
Sheet Thickness (mm)	4.0
Length in meters	Uniformly Distributed Loads (kN/m)
0.90 - 1.20	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

UML 250/50

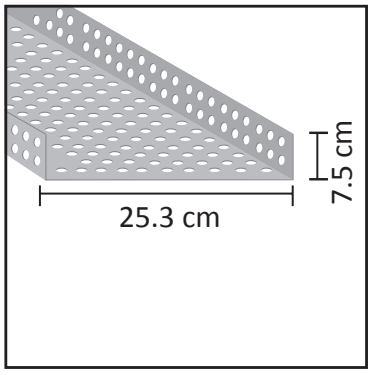
Working Load Tables



Lintel Code	UML 250/50-2	UML 250/50-3	UML 250/50-4
Sheet Thickness (mm)	2.0	3.0	4.0
Length in meters	Uniformly Distributed Loads (kN/m)		
0.90 - 1.20	0.43	1.50	2.70
1.30 - 1.50	0.26	1.0	1.80
1.60 - 1.80	0.18	0.70	1.28
1.90 - 2.10	0.13	0.52	0.80
2.20 - 2.40	0.09	0.38	0.50

UML 250/75

Working Load Tables

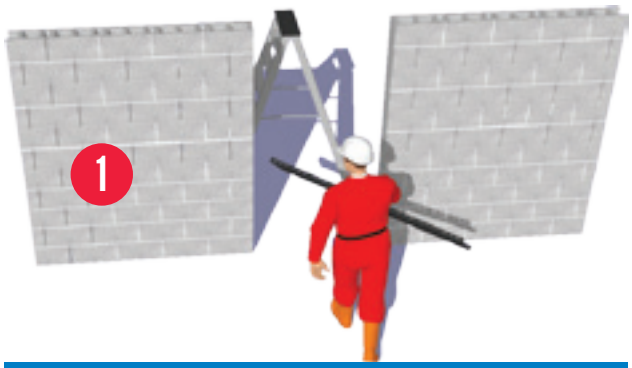


Lintel Code	UML 250/75-4
Sheet Thickness (mm)	4.0
Length in meters	Uniformly Distributed Loads (kN/m)
0.90 - 1.20	3.63
1.30 - 1.50	2.45
1.60 - 1.80	1.73
1.90 - 2.10	1.25
2.20 - 2.40	0.98

Safety Factor is at 135%

LINTELS INSTALLATION IN MINUTES

Comparison of installation times of a SFSP steel lintel and a conventional concrete cast in-situ lintel.



One man can carry the lintel

Lintel is placed in position

Continuation of block work
can be carried out immediately

Before laying the blocks down on lintel, place a temporary support beneath the lintel to provide support and to prevent deflection. Temporary support can be removed after the mortar sets, (approximately in 3 to 5 hours).

Total installation time: 6 minutes

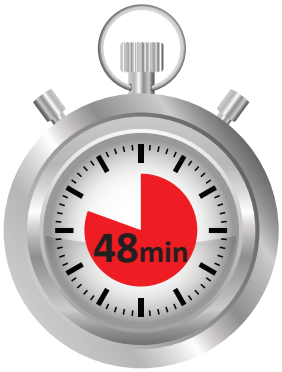
Concrete Cast - On site Installation

Vertical frame work erected, end secured and horizontal level taken

Commencement of lintel form work

Continuation of form work

Completion of lintel after steel reinforcement and pouring of concrete

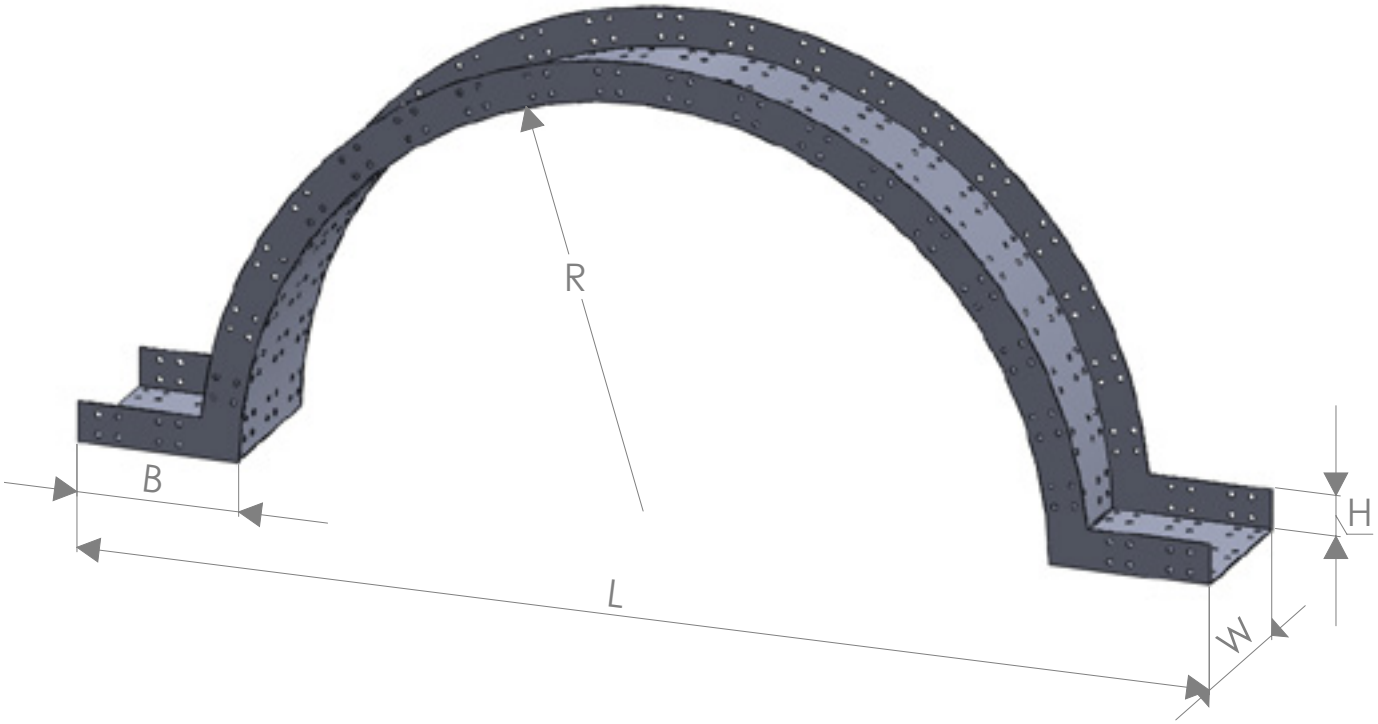


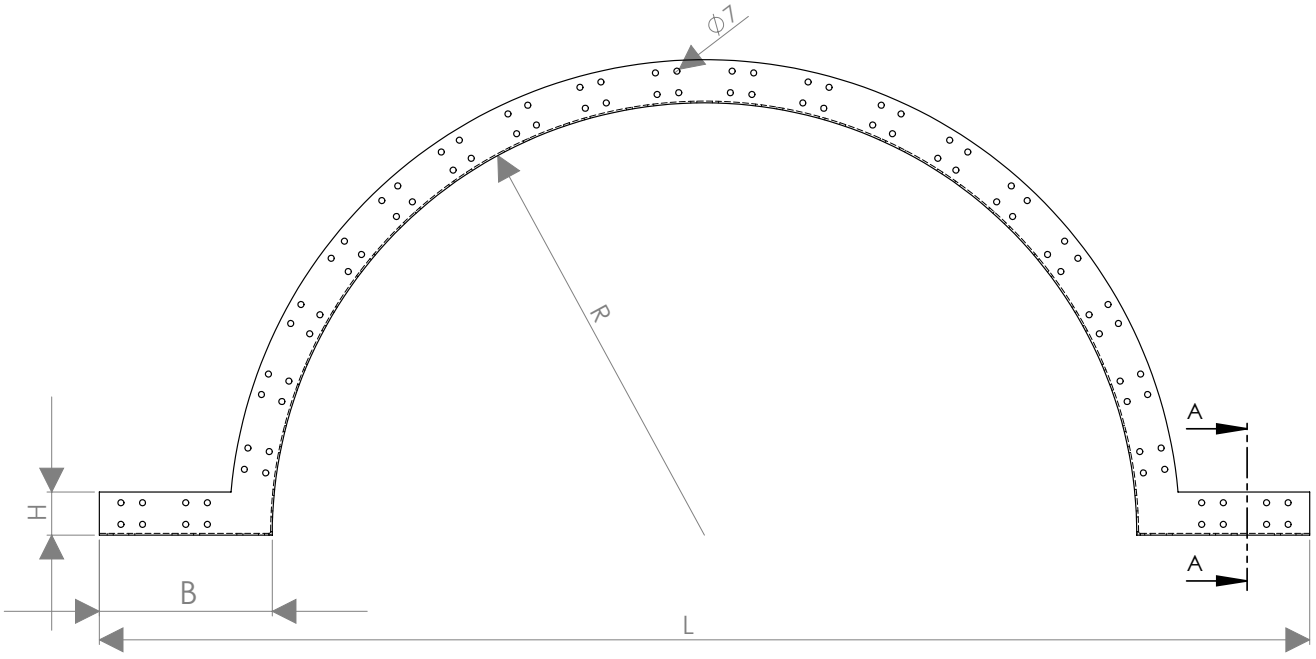
Total installation time: 48 minutes

In the time taken to install just one concrete lintel, eight SFSP lintels could have been installed...

ARCH LINTELS

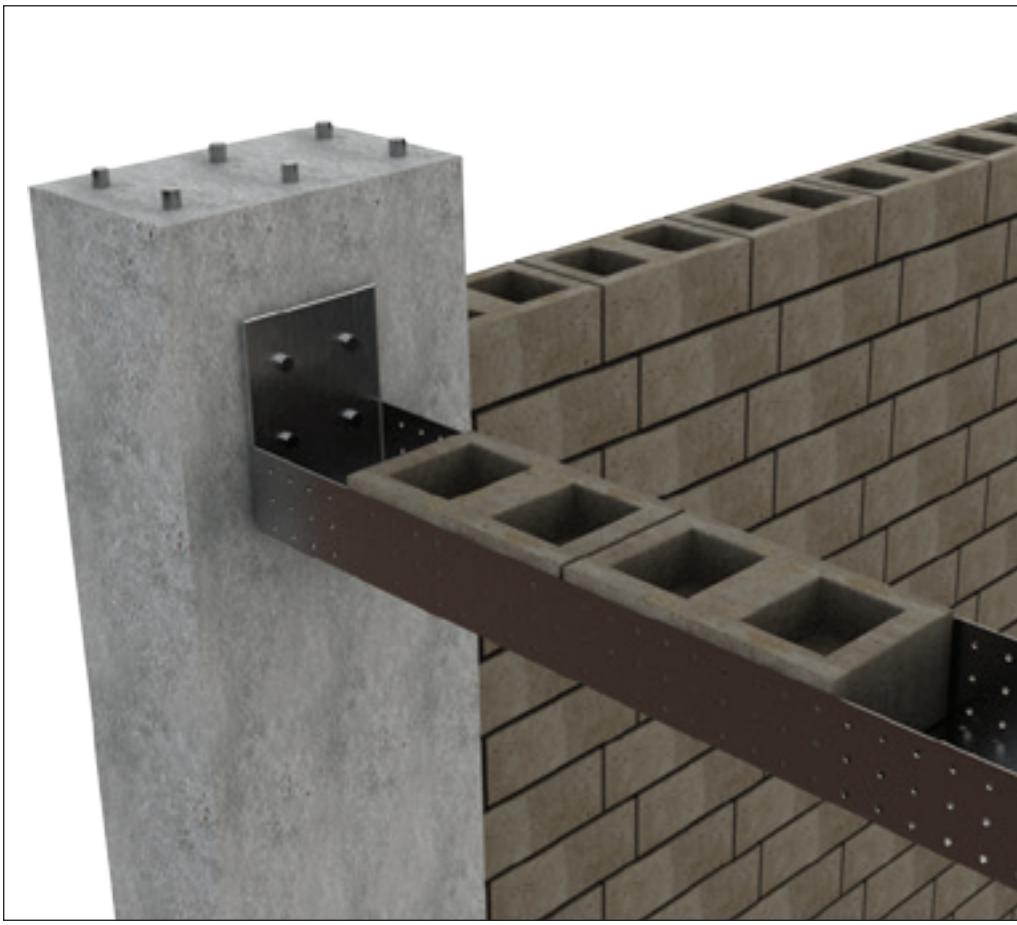
Description	Dimensions (mm)	Material
Arch Lintel	320x250x75x2.00	GI (Galvanized Steel)
Arch Lintel	420x250x75x2.00	GI (Galvanized Steel)
Arch Lintel	520x200x75x2.00	GI (Galvanized Steel)
Arch Lintel	520x250x75x2.00	GI (Galvanized Steel)
Arch Lintel	620x250x75x2.00	GI (Galvanized Steel)
Arch Lintel	920x250x75x2.00	GI (Galvanized Steel)
Arch Lintel	200x50x3.00x2500	Hot Dip Galvanized





LINTELS BRACKETS

Brackets are supplied with fixing holes to suit metal expansion anchor sizes as specified below.



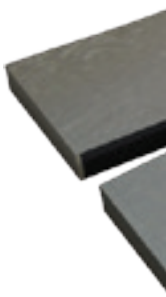
BLOCKWORK ACCESSORIES

BLOCK WORK ACCESSORIES

SFSP manufactures Block Work Accessories in accordance with:
- BS EN 845-1:2013+A1:2016

Relevant Standards
- BS 1243:1978

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) and then:

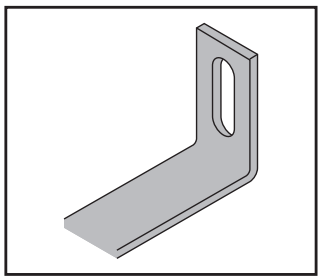
Manufacture Specifications:

- Steel Lintels - manufactured to BS 5977: Part 2 :1983 / BS EN 845-2:2003.
- 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 845-3:2003 DIN 488.

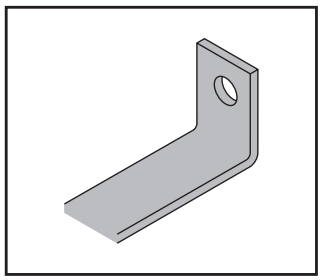
CRAMPS AND TIES

Head End Options

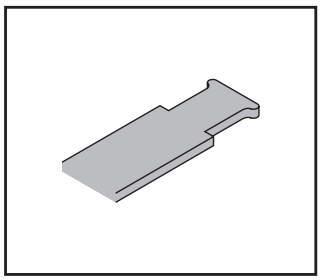
These ends have been manufactured to fit standard channel sections that is preset into concrete or surface fixed to any inner skin or structural ground



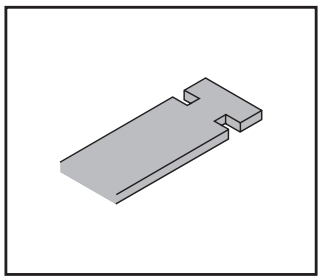
L-Angle Sloted



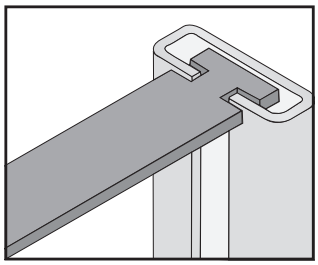
L-Angle Hole



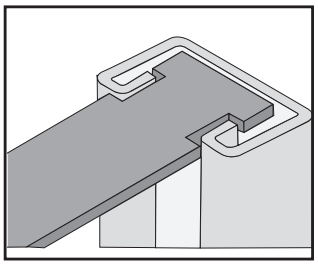
Plain



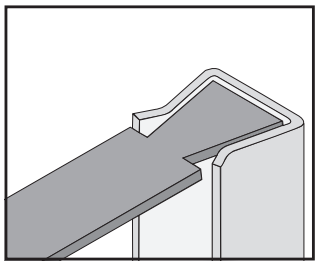
Plain



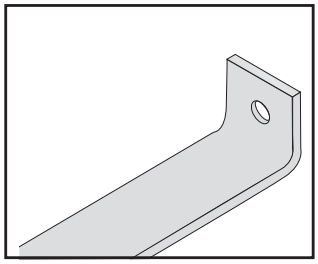
RCH / SCH Channel
REF: -/-/36



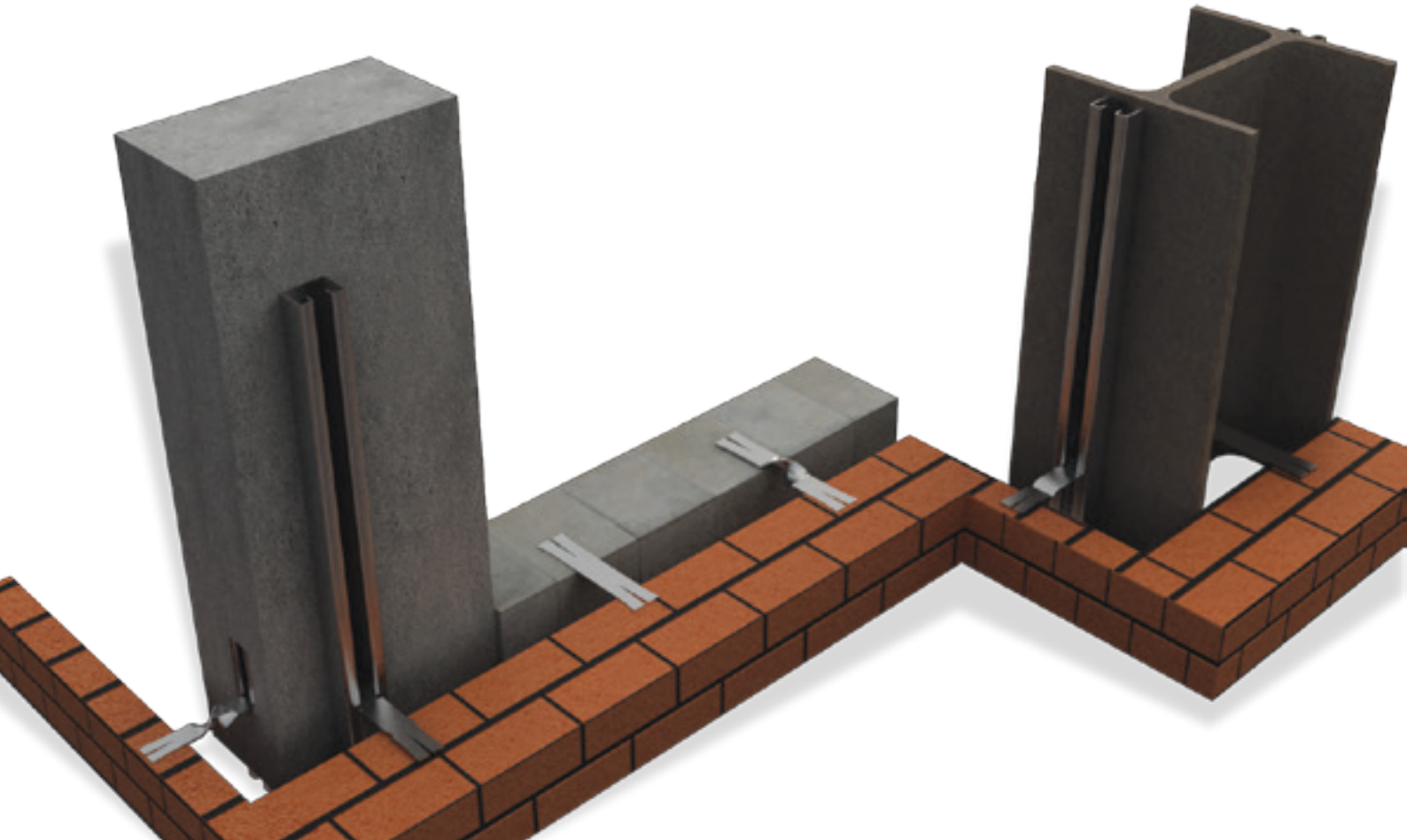
CCH Channel
REF: -/-/10



DCH Channel
REF: -/-/30

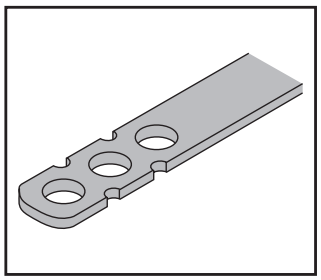


Bolt Screw Fixing
REF: -/-/50

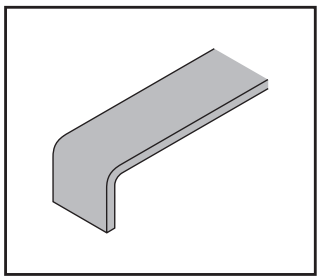


Tail End Options

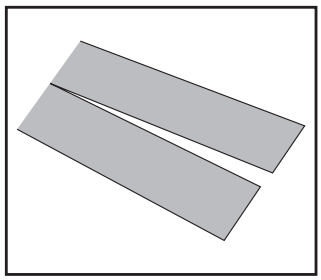
The most common method of anchoring a tie to a slab facing, is by means of a round dowel into a drilled hole, split tangs on the tie may also be used. For bonding into brickwork the “Fishtailed” end is the traditional.



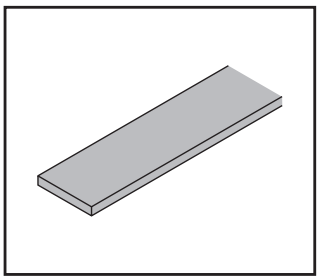
3 Holes



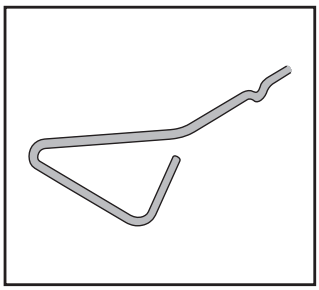
Turned Down



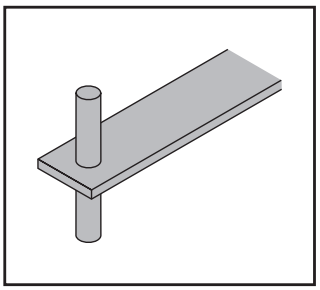
Split Tie



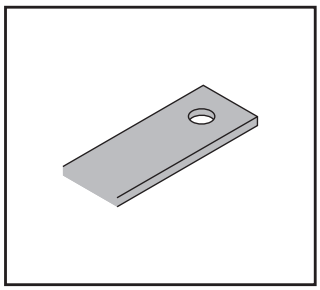
Plain



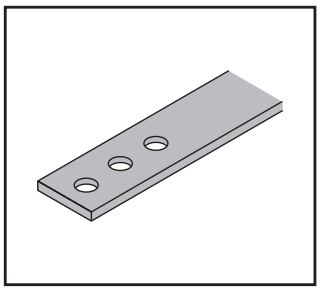
Returned Z



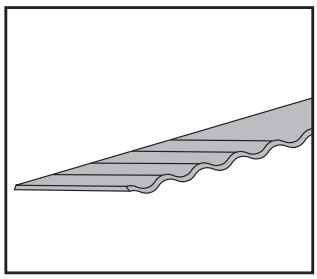
Plain with pin



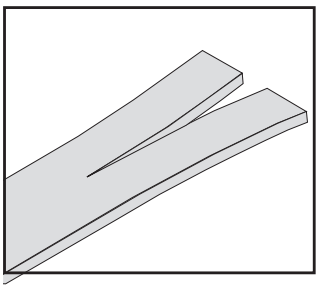
Plain 1 Hole



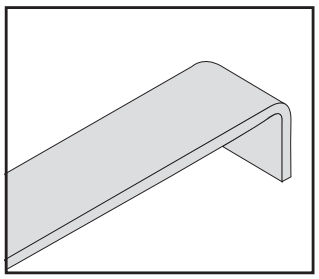
Plain 3 Holes



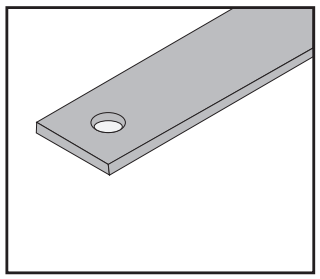
Corrugated



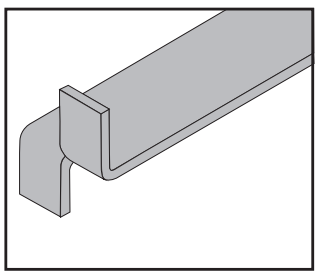
Fishtailed
REF: -/-/99



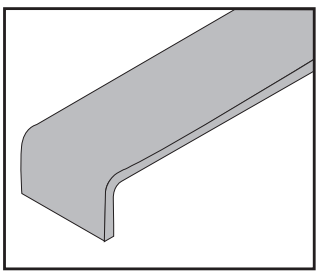
Turned Down
REF: -/-/88



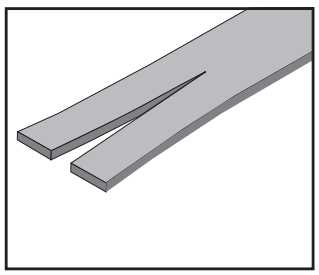
Dowel
REF: D/-/-



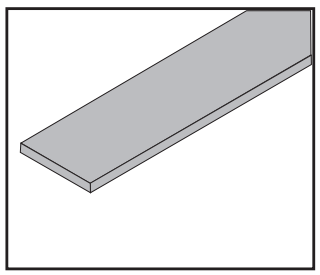
Split Tang
REF: S/-/-



Turned Down
REF: T/-/-



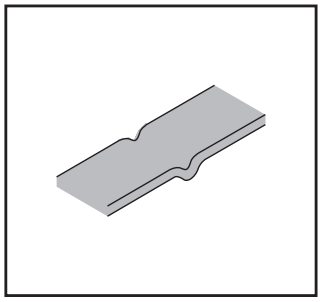
Fishtailed
REF: B/-/-



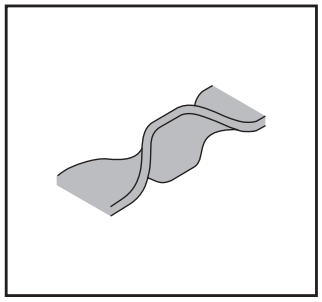
PLain
REF: P/-/-

Shank Options

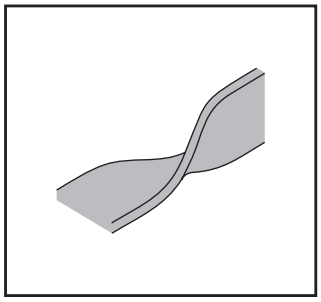
Shanks may be plain or may include a drip to stop the passage of moisture across



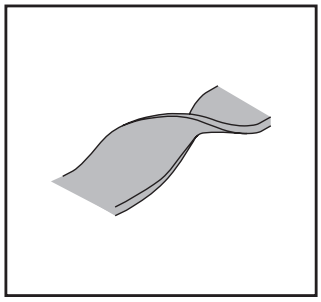
Drip



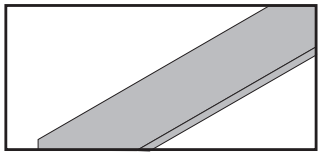
Double Twist



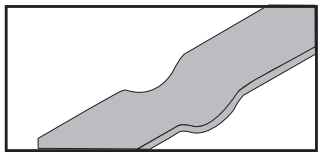
Half Twist



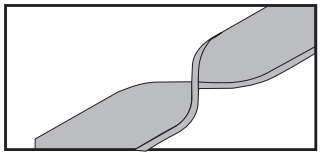
Full Twist



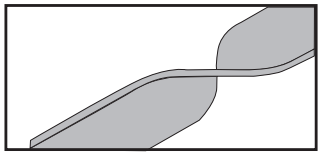
Plain
REF: -/P/-



Dimpled
REF: -/D/-

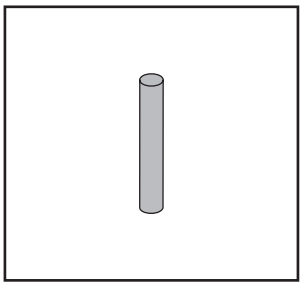


Full Twist
REF: -/F/-

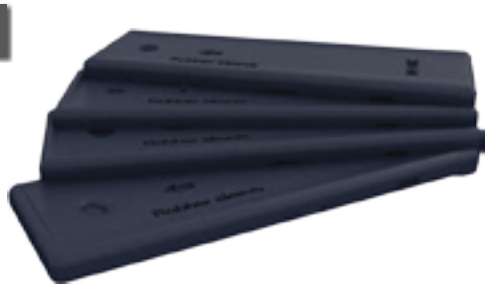


Half Twist
REF: -/H/-

Debonding Block Ties
REF: DS/-/-



Pin



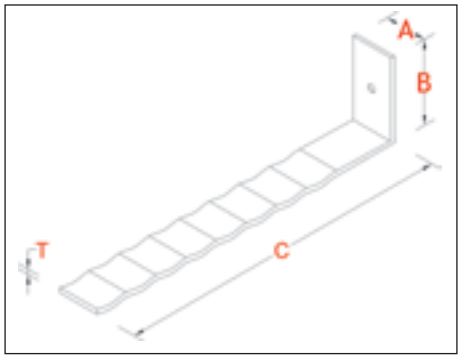
Rubber Sleeve
REF: S/-/-

Frame Cramps and Channel Ties

Frame cramps with a single 7mm diameter hole or an 8mm x 30mm vertical slot can be fixed to concrete, steelwork or masonry. M6 Single Expansion bolts are recomended for fixing to concrete, setscrews or self-drilling screws for steelwork, and suitable plugs and screws for fixing to masonry. Poor substrates will limit the capacity of frame crams and site treating is advisable in some cases. The performance will also be determined by the position of the fixing. Channel ties fixed to steelwork or concrete at the lowest point of slot will have a safe working load of approximately 1kN. the capacity will reduce as the fixing is moved further away from the bend and greater movement shall be expected than with other wall ties.

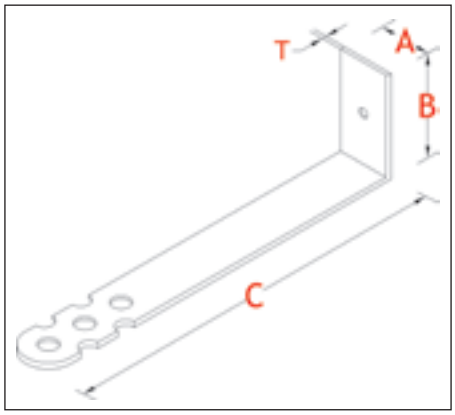
Block Ties Frame Cramps

Block Tie Corrugated with Bolt Screw Fixing



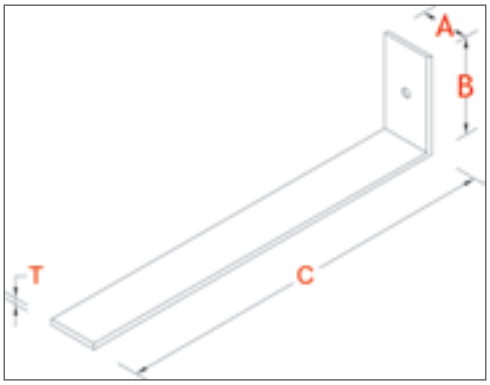
Description	Dimensions B x A x C x T (mm)	Material
Corrugated Block Tie	30x50x150x1.50	MS (Mild Steel)
Corrugated Block Tie	30x50x150x2.00	MS (Mild Steel)
Corrugated Block Tie	30x50x200x2.00	MS (Mild Steel)
Corrugated Block Tie	25x30x150x1.50	SS A4 (Stainless Steel)
Corrugated Block Tie	25x30x150x2.00	SS A4 (Stainless Steel)
Corrugated Block Tie	25x30x200x2.00	SS A4 (Stainless Steel)
Corrugated Block Tie	25x40x150x2.00	SS A4 (Stainless Steel)
Corrugated Block Tie	30x50x150x1.50	SS A4 (Stainless Steel)
Corrugated Block Tie	30x50x150x2.00	SS A4 (Stainless Steel)
Corrugated Block Tie	30x50x200x2.00	SS A4 (Stainless Steel)
Corrugated Block Tie	50x50x200x2.00	SS A4 (Stainless Steel)
Corrugated Block Tie	25x30x200x1.80	Galvanized
Corrugated Block Tie	20x75x200x1.50	Galvanized
Corrugated Block Tie	25x30x150x2.00	Galvanized
Corrugated Block Tie	25x30x200x1.50	Galvanized
Corrugated Block Tie	25x30x200x2.00	Galvanized
Corrugated Block Tie	30x50x150x1.50	Galvanized
Corrugated Block Tie	30x50x150x3.00	Galvanized
Corrugated Block Tie	30x50x200x1.50	Galvanized
Corrugated Block Tie	30x50x200x2.00	Galvanized
Corrugated Block Tie	38x50x200x1.50	Galvanized
Corrugated Block Tie	40x50x150x3.00	Galvanized

Three-Hole Block Tie



Description	Dimensions B x A x C x T (mm)	Material
Three - Hole Block Tie	30x50x150x1.50	Galvanized
Three - Hole Block Tie	20x30x150x3.00	Galvanized
Three - Hole Block Tie	20x30x250x3.00	Galvanized
Three - Hole Block Tie	20x30x255x3.00	Galvanized
Three - Hole Block Tie	25x30x150x1.50	Galvanized
Three - Hole Block Tie	25x30x200x1.50	Galvanized
Three - Hole Block Tie	25x30x200x1.80	Galvanized
Three - Hole Block Tie	25x30x200x2.00	Galvanized
Three - Hole Block Tie	30x40x200x1.50	Galvanized
Three - Hole Block Tie	30x40x200x2.00	Galvanized
Three - Hole Block Tie	30x40x300x2.00	Galvanized
Three - Hole Block Tie	25x30x200x2.00	SS A4 (Stainless Steel)
Three - Hole Block Tie	30x50x150x1.50	SS A4 (Stainless Steel)
Three - Hole Block Tie	30x50x200x1.50	SS A4 (Stainless Steel)
Three - Hole Block Tie	20x30x150x3.00	SS A6 (Stainless Steel)
Three - Hole Block Tie	20x30x250x3.00	SS A6 (Stainless Steel)
Three - Hole Block Tie	20x30x255x3.00	SS A6 (Stainless Steel)
Three - Hole Block Tie	25x30x200x2.00	SS A6 (Stainless Steel)

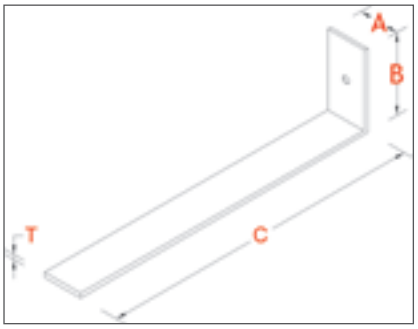
Block Tie Plain



Description	Dimensions A x B x C x T (mm)	Material
Block Tie Plain	27x80x150x2.00	Galvanized
Block Tie Plain	20x30x150x3.00	Galvanized
Block Tie Plain	20x30x200x3.00	Galvanized
Block Tie Plain	20x30x250x3.00	Galvanized
Block Tie Plain	20x30x255x3.00	Galvanized
Block Tie Plain	25x20x175x2.00	Galvanized
Block Tie Plain	25x30x100x1.50	Galvanized
Block Tie Plain	25x30x150x1.50	Galvanized
Block Tie Plain	25x30x150x1.80	Galvanized
Block Tie Plain	25x30x150x3.00	Galvanized
Block Tie Plain	25x30x175x2.00	Galvanized
Block Tie Plain	25x30x200x1.80	Galvanized
Block Tie Plain	25x30x200x2.00	Galvanized
Block Tie Plain	25x50x120x1.80	Galvanized
Block Tie Plain	25x50x200x1.50	Galvanized
Block Tie Plain	25x50x250x1.80	Galvanized
Block Tie Plain	27x30x120x1.50	Galvanized
Block Tie Plain	27x40x120x2.00	Galvanized
Block Tie Plain	27x45x125x1.50	Galvanized
Block Tie Plain	27x45x125x2.00	Galvanized
Block Tie Plain	27x45x140x2.00	Galvanized
Block Tie Plain	27x50x125x2.00	Galvanized
Block Tie Plain	27x50x150x1.50	Galvanized

Description	Dimensions A x B x C x T (mm)	Material
Block Tie Plain	27x50x150x2.00	Galvanized
Block Tie Plain	27x80x150x2.00	Galvanized
Block Tie Plain	30x40x150x2.00	Galvanized
Block Tie Plain	30x40x200x2.00	Galvanized
Block Tie Plain	30x50x190x1.50	Galvanized
Block Tie Plain	30x50x200x1.50	Galvanized
Block Tie Plain	30x50x80x1.20	Galvanized
Block Tie Plain	25x30x150x2.00	SS A4
Block Tie Plain	25x30x150x3.00	SS A4
Block Tie Plain	25x30x200x2.00	SS A4
Block Tie Plain	27x40x120x2.00	SS A4
Block Tie Plain	27x45x125x1.50	SS A4
Block Tie Plain	27x45x125x2.00	SS A4
Block Tie Plain	27x50x150x1.50	SS A4
Block Tie Plain	27x80x150x2.00	SS A4
Block Tie Plain	30x45x150x2.00	SS A4
Block Tie Plain	30x50x150x1.50	SS A4
Block Tie Plain	30x50x190x1.50	SS A4
Block Tie Plain	20x30x250x3.00	SS A6
Block Tie Plain	20x30x255x3.00	SS A6
Block Tie Plain	27x45x125x1.50	SS A6
Block Tie Plain	40x40x250x3.00	SS A6

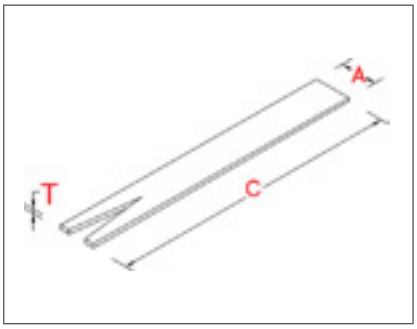
Block Tie Plain



Description	Dimensions A x B x C x T (mm)	Material
Block Tie Plain	27x80x150x2.00	Galvanized
Block Tie Plain	20x30x150x3.00	Galvanized
Block Tie Plain	20x30x200x3.00	Galvanized
Block Tie Plain	20x30x250x3.00	Galvanized
Block Tie Plain	20x30x255x3.00	Galvanized
Block Tie Plain	25x20x175x2.00	Galvanized
Block Tie Plain	25x30x100x1.50	Galvanized
Block Tie Plain	25x30x150x1.50	Galvanized
Block Tie Plain	25x30x150x1.80	Galvanized
Block Tie Plain	25x30x150x3.00	Galvanized
Block Tie Plain	25x30x175x2.00	Galvanized
Block Tie Plain	25x30x200x1.80	Galvanized
Block Tie Plain	25x30x200x2.00	Galvanized
Block Tie Plain	25x50x120x1.80	Galvanized
Block Tie Plain	25x50x200x1.50	Galvanized
Block Tie Plain	25x50x250x1.80	Galvanized
Block Tie Plain	27x30x120x1.50	Galvanized
Block Tie Plain	27x40x120x2.00	Galvanized
Block Tie Plain	27x45x125x1.50	Galvanized
Block Tie Plain	27x45x125x2.00	Galvanized
Block Tie Plain	27x45x140x2.00	Galvanized
Block Tie Plain	27x50x125x2.00	Galvanized
Block Tie Plain	27x50x150x1.50	Galvanized
Block Tie Plain	27x50x150x2.00	Galvanized

Description	Dimensions A x B x C x T (mm)	Material
Block Tie Plain	27x80x150x2.00	Galvanized
Block Tie Plain	27x80x150x2.00	Galvanized
Block Tie Plain	30x40x150x2.00	Galvanized
Block Tie Plain	30x40x200x2.00	Galvanized
Block Tie Plain	30x50x190x1.50	Galvanized
Block Tie Plain	30x50x200x1.50	Galvanized
Block Tie Plain	30x50x80x1.20	Galvanized
Block Tie Plain	25x30x150x2.00	SS A4
Block Tie Plain	25x30x150x3.00	SS A4
Block Tie Plain	25x30x150x3.00	SS A4
Block Tie Plain	25x30x200x2.00	SS A4
Block Tie Plain	27x40x120x2.00	SS A4
Block Tie Plain	27x45x125x1.50	SS A4
Block Tie Plain	27x45x125x2.00	SS A4
Block Tie Plain	27x50x150x1.50	SS A4
Block Tie Plain	27x80x150x2.00	SS A4
Block Tie Plain	27x80x150x2.00	SS A4
Block Tie Plain	27x80x150x2.00	SS A4
Block Tie Plain	30x45x150x2.00	SS A4
Block Tie Plain	30x50x150x1.50	SS A4
Block Tie Plain	30x50x190x1.50	SS A4
Block Tie Plain	20x30x250x3.00	SS A6
Block Tie Plain	20x30x255x3.00	SS A6
Block Tie Plain	27x45x125x1.50	SS A6
Block Tie Plain	40x40x250x3.00	SS A6

Block Tie Fish Tailed



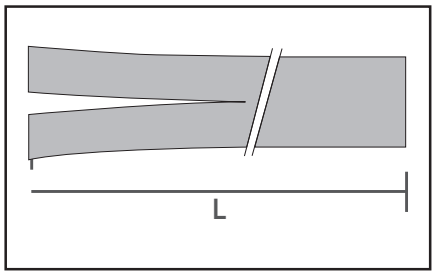
Description	Dimensions A x C x T (mm)	Material
FishTailed	25x250x2.00	Galvanized
FishTailed	25x200x1.50	Galvanized
FishTailed	25x200x1.80	Galvanized
FishTailed	25x200x2.00	Galvanized
FishTailed	25x200x3.00	Galvanized
FishTailed	25x200x3.00	Galvanized
FishTailed	25x250x2.00	Galvanized
FishTailed	25x300x2.00	Galvanized
FishTailed	30x200x1.50	Galvanized
FishTailed	30x200x1.80	Galvanized
FishTailed	30x200x2.00	Galvanized
FishTailed	30x220x1.50	Galvanized
FishTailed	30x225x2.00	Galvanized
FishTailed	30x300x2.00	Galvanized
FishTailed	35x100x1.20	Galvanized
FishTailed	50x200x2.00	Galvanized

Description	Dimensions A x C x T (mm)	Material
FishTailed	50x200x4.00	Galvanized
FishTailed	40x200x2.00	MS
FishTailed	50x200x3.00	SS A4
FishTailed	25x200x2.00	SS A4
FishTailed	25x200x2.50	SS A4
FishTailed	25x200x3.00	SS A4
FishTailed	25x225x2.00	SS A4
FishTailed	25x300x2.00	SS A4
FishTailed	30x200x1.50	SS A4
FishTailed	30x200x2.00	SS A4
FishTailed	30x225x2.00	SS A4
FishTailed	30x300x2.00	SS A4
FishTailed	35x100x1.20	SS A4
FishTailed	25x200x2.00	SS A6
FishTailed	30x200x2.00	SS A6
FishTailed	30x200x2.00	SS A6

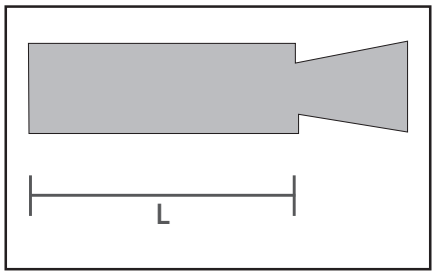
DOVE TAIL (TWA)

Reference Codes

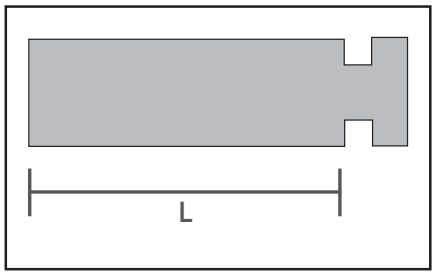
Each tie will consist of a tail element, for attachment to the facing material, a shank element, and a head element, for attachment to the structure.



Fish Tail
REF: B/-/-



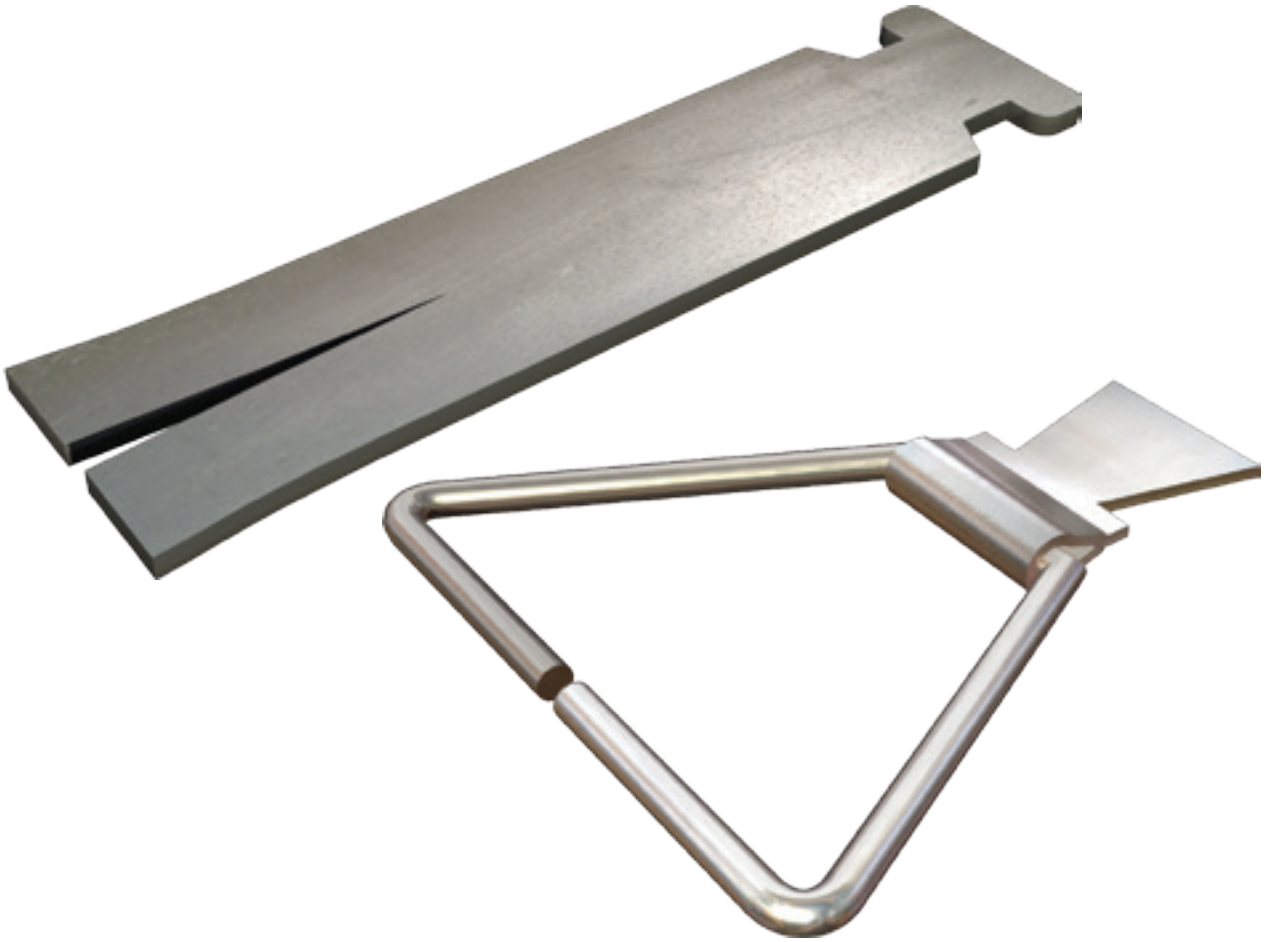
DCH -/-/30



CCH -/-/10

ADJUSTABLE WALL TIE (AWT)

Device for connecting a masonry leaf across a cavity to another masonry leaf or to a structural frame to resist tension and compression forces while allowing limited differential movement in the plane of the wall.
Wall ties are an important element in the stability of cavity walls. The correct selection, spacing and installation of ties is recomended to avoid damp penetration and cracking of masonry. Wall ties may only be mounted in a horizontal position and in the plane (on level) between the masonry leaves of the cavity wall once the mortar has been applied on the block work, the tie must be embedded in the mortar, cover as well is top with mortar. The tie must be extend in the mortar joints at least 90 mm in the inner leaf and at least 65 mm in the outer leaf.
Wall ties are further sub classified as asymmetrical or symmetrical.
Wall ties is for us in the external walls, suitable for flat sites where basic wind speed is up to 30 m/s.



Installation of Ties

Wall ties shall be pressed down in and surrounded by fresh mortar.

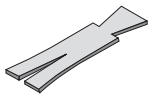
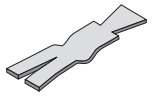
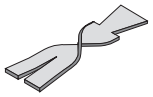
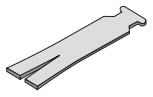
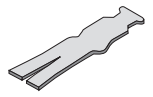
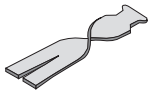
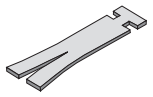
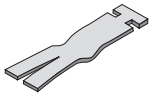
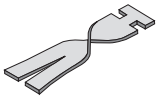
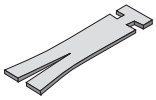
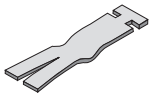
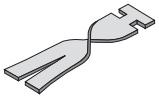
To ensure cavity wall ties are effective at tying the leaves together they should be installed as the inner leaf is constructed not simply pushed into a joint.

Ties should be installed with a slight fall to the outer leaf, never towards the inner leaf as this could provide path for moisture to cross the cavity.

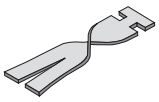
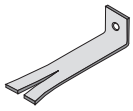
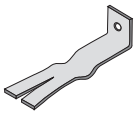
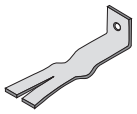
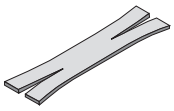
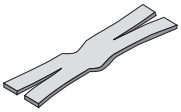
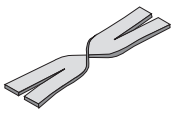
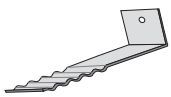
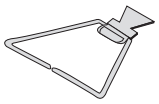
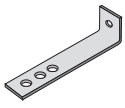
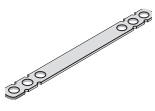
The drip part of the tie should point downwards and be positioned near the Centre of the open cavity.

Installed ties should be clear of mortar droppings to allow the drip to function and prevent water from crossing to the inner leaf of masonry.

LENGTH OF TIES IN MM TO SUIT CAVITY

					Cavity				
Tie	**Reference Code**	**Description**	**Section Size (mm)**	**Thick-ness (mm)**	**Length 0 - 20 (mm)**	**Length 15 - 45 (mm)**	**Length 40 -70 (mm)**	**Length 65 - 70 (mm)**	**Position of Drip (min) mm**
	B/P/30	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0	75	100	150	200	
	B/D/30	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0		100	150	200	20
	B/F/30	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0			150	200	30
	B/P/21	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0	75	100	150	200	
	B/D/21	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0		100	150	200	20
	B/F/21	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0		100	150	200	30
	B/P/28	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0	75	100	150	200	
	B/D/28	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0		100	150	200	20
	B/F/28	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0			150	200	30
	B/P/36	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0	75	100	150	200	
	B/D/36	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0		100	150	200	20
	B/F/36	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0			150	200	30

Other specified sizes are available upon request.

					Cavity				
Tie	**Reference Code**	**Description**	**Section Size (mm)**	**Thick-ness (mm)**	**Length 0 - 20 (mm)**	**Length 15 - 45 (mm)**	**Length 40 -70 (mm)**	**Length 65 - 70 (mm)**	**Position of Drip (min) mm**
	B/F/36	Brick Facing Tie	20 25	1.5 2.0 2.5 3.0			150	200	30
	B/P/50	Brick Facing Tie	30 25	1.5 2.0 2.5 3.0	75	100			
	B/D/50	Brick Facing Tie	30 25	1.5 2.0 2.5 3.0		100			
	B/F/50	Brick Facing Tie	30 25	1.5 2.0 2.5 3.0					
	B/P/99	Cavity Wall Tie	30 25	1.5 2.0 2.5 3.0	150	200	250	300	
	B/D/99	Cavity Wall Tie	30 25	1.5 2.0 2.5 3.0	150	200	250	300	
	B/F/99	Cavity Wall Tie	30 25	1.5 2.0 2.5 3.0	150	200	250	300	
	C/C/30	Corrug. Strip	30 25	1.5 2.0 2.5 3.0	150	200	250	300	
	C/C/50	Corrug. Bracket	30 25	1.5 2.0 2.5 3.0	75	100	150	200	
	V/W/04	VEE Tie	ø 4,5,6	1.5 2.0 2.5 3.0	75	100	125	150	
	B/T/25	Wall Tie An-chor	30 25	1.5 2.0 2.5 3.0	75	100	125	150	
	S/S/15	Cavity Wall Tie	30 25	1.5 2.0 2.5 3.0	150	200	250	300	

Other specified sizes are available upon request.

CAVITY WALL TIE INFORMATION

To comply with: DIN 1053, at least 5 pieces of cavity wall ties should be used per square meter in accordance with DIN 17440, material of SS. 1.4401 or SS 1.4571.
Three additional wall ties are required for the edges of building.

The distance between the ties should be maximum 500 mm vertically, and not more than750 mm horizontally. The thickness of the wire tie depends on the height of the building and on the size of the wall cavity.

The minimum thickness is 3 mm. For walls that are higher than 12 m above ground level or where the gaps between the walls are more than 70 mm to 120 mm, a minimum of 5 wall ties with diameters of 4 mm are to be inserted.

If the gaps between the walls are more than 120 to 150 mm, a minimum of 7 wall ties with diameters of 4 mm or 5 wall ties with diameters of 5 mm are to be inserted.

The length of the wall tie should be measured in such a way that the anchor is embedded 50 mm into the masonry and a further 25 mm is bent round.

The thickness of the cavity and the thickness of the insulating material shall be added.

Cavity Wall Ties

Double Triangle Wall Tie, Butterfly & Three - Hole Wall Tie

Length of Tie and Embedment

Wall Ties should be of the correct length to ensure they are properly embedded in the masonry. The tie should have a minimum embedment of 50mm in each leaf but also take site tolerances into account for both cavity width and centering of the tie. For this reason, we suggest tie lengths which achieve an embedment of between 62.5mm and 75mm.
Recomended lengths to suit various cavity widths are shown for masonry-to-masonry wall ties.

Dimensional Standards

Fixed Dimensions
When Specifying ties certain set or minimum dimensions shall be followed, these are described as fixed dimensions and based on the limitations of material and the production processes.

Where a screw or bolt fixing is to be made a minimum length of 30mm is required.

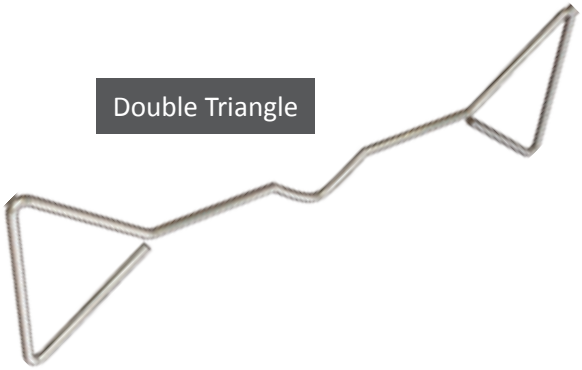
Lengths
Lengths are generally measured to the extremity of the tie.
For ties fitting into channels the specified length is measured to the shoulder of the tie.

Wire Ties
A range of cavity wall ties are available manufactured in accordance with BS EN 845-1 which supersedes BS 1243. These are available in stainless steel, pre-galvanized or hot-dip galvanized steel, and to the dimensions shown.

Installation of ties

Wall ties should be pressed down in, and surrounded by, fresh mortar.
To ensure cavity wall ties are effective at tying the leaves together they should be installed as the inner leaf is constructed and not simply pushed into a joint.
Ties should be installed with a slight fall to the outer leaf, never to wards the inner leaf as this could provide a path for moisture to cross the cavity.
The drip part of the tie should point downwards and be positioned near the centre of the open cavity.
Installed ties should be clear of mortar droppings to allow the drip to function and prevent water from crossing to the inner leaf of masonry.

Butterfly



Double Triangle

BUTTERFLY TIE /TRIANGLE TIE

Wire Ties

A range of cavity wall ties are available manufactured in accordance with BS 123:1978. These are available in stainless steel, pre-galvanized or hot-dip galvanized steel, and to the dimensions shown.

Description	Dimensions (mm)	Material
Butterfly Tie	30x190x3.00	SS A4
Butterfly Tie	30x190x3.00	SS A4
Butterfly Tie	30x200x1.50	SS A4
Butterfly Tie	75x200x3.00	SS A4
Butterfly Tie	65x200x4.00	SS A4
Butterfly Tie	75x250x3.00	SS A4
Butterfly Tie	75x200x3.00	Galvanized
Butterfly Tie	65x200x4.00	Galvanized
Butterfly Tie	75x200x4.00	Galvanized
Butterfly Tie	65x390x4.00	Galvanized
Butterfly Tie	65x360x4.00	Galvanized
Butterfly Tie	65x150x4.00	Galvanized
Butterfly Tie	65x250x4.00	Galvanized
Butterfly Tie	75x300x4.00	Galvanized

Description	Dimensions (mm)	Material
Double Triangle	50x250x4.80	Galvanized
Double Triangle	65x250x4.80	Galvanized
Double Triangle	65x300x4.80	Galvanized
Double Triangle	50x250x4.80	Galvanized
Double Triangle	65x250x4.80	Galvanized
Double Triangle	65x300x4.80	Galvanized
Double Triangle	65x250x4.80	Galvanized
Double Triangle	65x300x4.80	Galvanized
Double Triangle	120X50X5.00	Galvanized
Double Triangle	80x250x4.80	Galvanized
Double Triangle	65x200x4.00	Galvanized
Double Triangle	75x250x4.00	Galvanized

Description	Dimensions (mm)	Material
Double Triangle	75x300x4.00	Galvanized
Double Triangle	65x200x3.00	Galvanized
Double Triangle	65x200x3.00	Galvanized
Double Triangle	30x200x4.00	Galvanized
Double Triangle	65x200x4.00	Galvanized
Double Triangle	65x250x5.00	SS A4
Double Triangle	65x300x4.80	SS A4
Double Triangle	65x250x4.80	SS A4
Double Triangle	50x250x4.80	SS A4
Double Triangle	50x250x4.80	SS A4
Double Triangle	65x250x4.80	SS A4
Double Triangle	65x300x4.80	SS A4
Double Triangle	65x250x4.80	SS A4
Double Triangle	120X50X5.00	SS A4
Double Triangle	65x200x4.00	SS A4
Double Triangle	80x250x5.00	SS A4
Double Triangle	65x150x4.00	SS A4
Double Triangle	65x250x4.00	SS A4
Double Triangle	65x200x3.00	SS A4

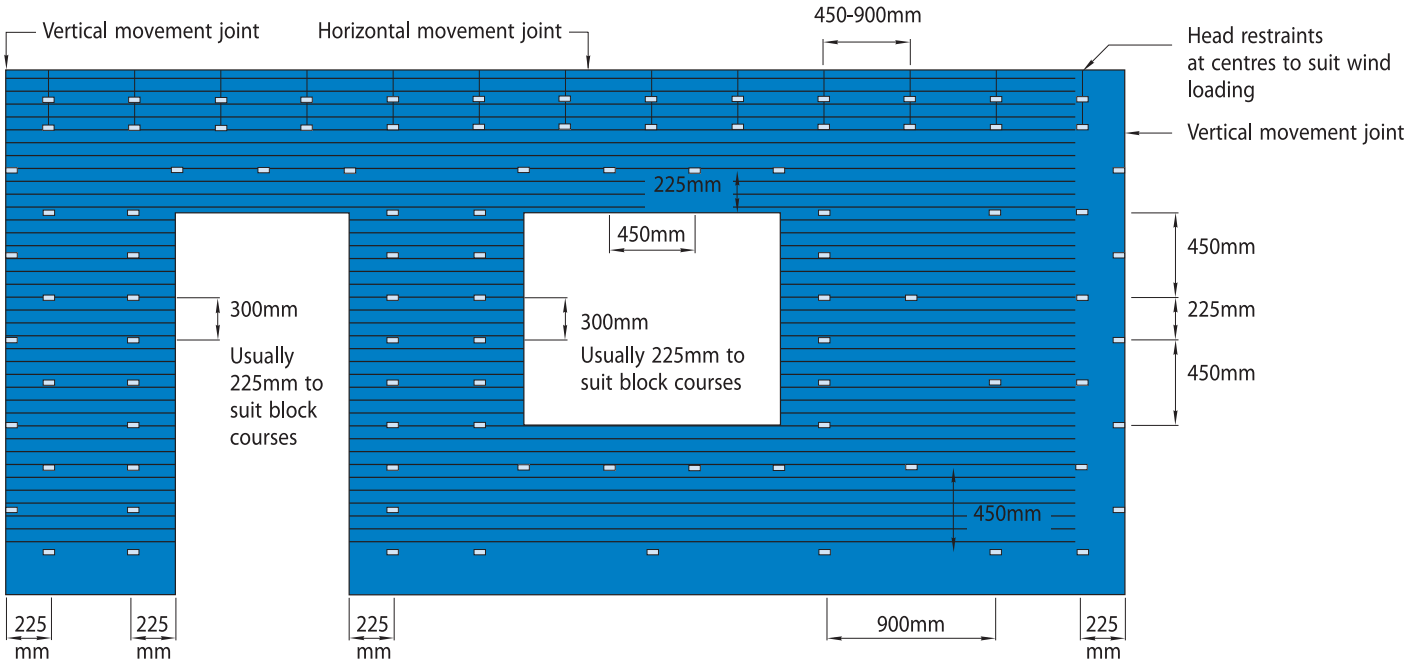
ARRANGEMENT OF ADDITIONAL TIE CRAMPS

For walls in which both leaves are 90mm or thicker, ties should be used at not less than 2.5 per square meter (900mm horizontal and 450mm vertical centers). This spacing may be varied by building regulations.

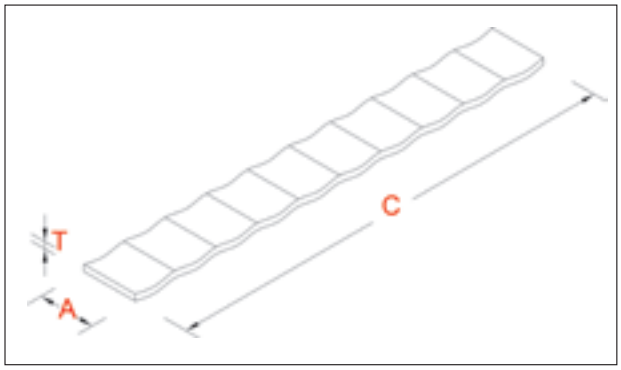
Ties should be evenly distributed over the wall area, except around openings, and should be preferable staggers.

At vertical edges of an opening, unreturned or unbounded edges, and vertical expansion joints, additional ties should be used. Such ties should be located at 300 mm vertical centers, positioned not more than 225 mm from the edge.

3 pieces wall ties per meter, additional ties should be installed:
- At edge (corner)
- Along expansion joints
- At opening
- At the upper end

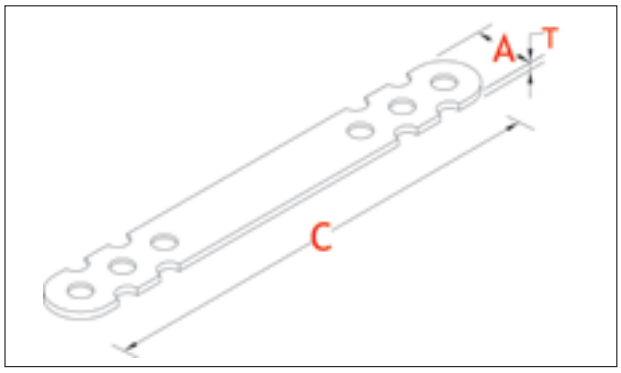


Cavity Tie Corrugated



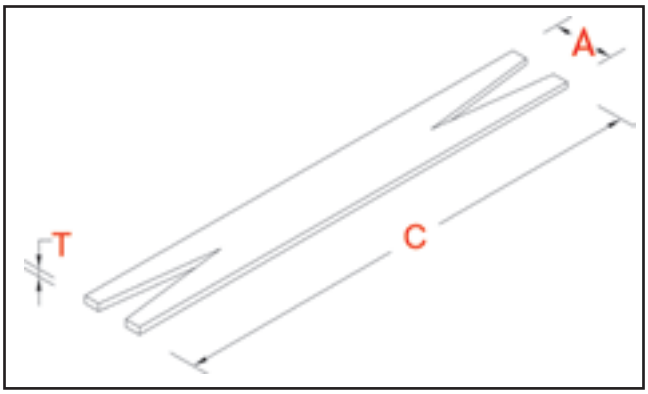
Description	Dimensions A x C x T (mm)	Material
Cavity Tie Corrugated	25x200x2.00	Galvanized
Cavity Tie Corrugated	25x200x3.00	Galvanized
Cavity Tie Corrugated	30x200x1.50	Galvanized
Cavity Tie Corrugated	25x200x2.00	AA S4
Cavity Tie Corrugated	30x200x1.50	AA S4
Cavity Tie Corrugated	30x250x2.00	AA S4
Cavity Tie Corrugated	40x250x2.00	AA S4
Cavity Tie Corrugated	25x200x3.00	AA S6
Cavity Tie Corrugated	25x200x3.00	AA S6

Cavity Tie With 3Holes



Description	Dimensions A x C x T (mm)	Material
Cavity Tie with 3 Holes	20x200x3.00	Galvanized
Cavity Tie with 3 Holes	20x255x3.00	Galvanized
Cavity Tie with 3 Holes	20x255x3.00	Galvanized
Cavity Tie with 3 Holes	25x200x1.80	Galvanized
Cavity Tie with 3 Holes	25x200x2.00	Galvanized
Cavity Tie with 3 Holes	25x250x2.00	Galvanized
Cavity Tie with 3 Holes	30x300x1.50	Galvanized
Cavity Tie with 3 Holes	30x300x1.50	Mild Steel
Cavity Tie with 3 Holes	25x200x2.00	AA S4

Cavity Tie Fish Tailed



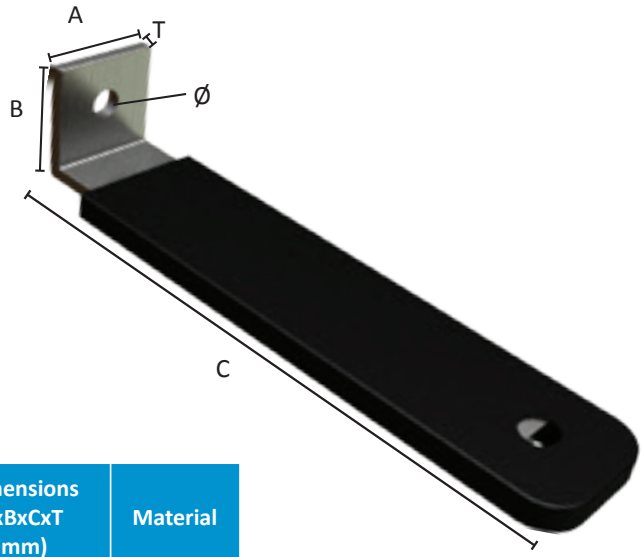
Description	Dimensions A x C x T (mm)	Material
Cavity Tie Fish Tailed	25x250x2.00	Galvanized
Cavity Tie Fish Tailed	25x200x1.50	Galvanized
Cavity Tie Fish Tailed	25x200x1.80	Galvanized
Cavity Tie Fish Tailed	25x200x2.00	Galvanized
Cavity Tie Fish Tailed	25x200x3.00	Galvanized
Cavity Tie Fish Tailed	25x200x3.00	Galvanized
Cavity Tie Fish Tailed	25x250x2.00	Galvanized
Cavity Tie Fish Tailed	25x300x2.00	Galvanized
Cavity Tie Fish Tailed	30x200x1.50	Galvanized
Cavity Tie Fish Tailed	30x200x1.80	Galvanized
Cavity Tie Fish Tailed	30x200x2.00	Galvanized
Cavity Tie Fish Tailed	30x220x1.50	Galvanized
Cavity Tie Fish Tailed	30x225x2.00	Galvanized
Cavity Tie Fish Tailed	30x300x2.00	Galvanized
Cavity Tie Fish Tailed	35x100x1.20	Galvanized
Cavity Tie Fish Tailed	50x200x2.00	Galvanized
Cavity Tie Fish Tailed	50x200x4.00	Galvanized
Cavity Tie Fish Tailed	40x200x2.00	Mild Steel

Description	Dimensions A x C x T (mm)	Material
Cavity Tie Fish Tailed	50x200x3.00	AA S4
Cavity Tie Fish Tailed	25x200x2.00	AA S4
Cavity Tie Fish Tailed	25x200x2.50	AA S4
Cavity Tie Fish Tailed	25x200x3.00	AA S4
Cavity Tie Fish Tailed	25x225x2.00	AA S4
Cavity Tie Fish Tailed	25x300x2.00	AA S4
Cavity Tie Fish Tailed	30x200x1.50	AA S4
Cavity Tie Fish Tailed	30x200x2.00	AA S4
Cavity Tie Fish Tailed	30x225x2.00	AA S4
Cavity Tie Fish Tailed	30x300x2.00	AA S4
Cavity Tie Fish Tailed	35x100x1.20	AA S4
Cavity Tie Fish Tailed	25x200x2.00	AA S4
Cavity Tie Fish Tailed	30x200x2.00	AA S4
Cavity Tie Fish Tailed	30x200x2.00	AA S4

DEBONDING CAVITY BLOCK TIE

Specifications:

Debonding Block Tie are manufactured from the following:
A. Galvanized Steel Sheet: BS 2989, ASTM A 653M, Commercial Steel, Z 180 zinc coating.
B. Stainless Steel Sheet: ASTM A 666, Type 304/Type 316.



Description	Dimensions AxBxCxT (mm)	Material
Debonding Cavity	25x30x300x1.50	Galvanized
Debonding Cavity	25x30x300x3.00	Galvanized
Debonding Cavity	25x30x75x1.50	Galvanized
Debonding Cavity	25x30x75x3.00	Galvanized
Debonding Cavity	30x40x300x1.50	Galvanized
Debonding Cavity	30x40x300x3.00	Galvanized
Debonding Cavity	30x40x75x1.50	Galvanized
Debonding Cavity	30x40x75x3.00	Galvanized
Debonding Cavity	25x150x1.50	Galvanized
Debonding Cavity	25x300x1.50	Galvanized
Debonding Cavity	25x300x3.00	Galvanized
Debonding Cavity	25x30x300x1.50	AA S4
Debonding Cavity	25x30x300x3.00	AA S4
Debonding Cavity	25x30x75x1.50	AA S4
Debonding Cavity	25x30x75x3.00	AA S4
Debonding Cavity	30x40x300x1.50	AA S4
Debonding Cavity	30x40x300x3.00	AA S4
Debonding Cavity	30x40x75x1.50	AA S4
Debonding Cavity	30x40x75x3.00	AA S4

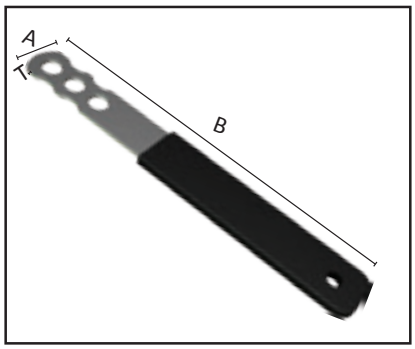
DEBONDING CONTROL JOINTS FLAT TIE

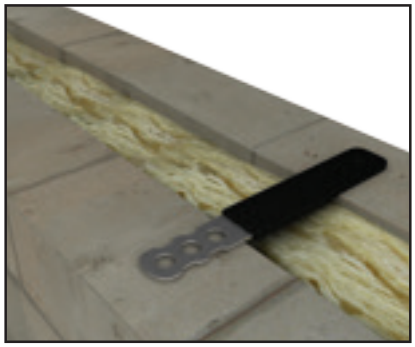
Specifications:

SFSP Debonding Control Joints Tie are manufactured from the following:

A. Galvanized Steel Sheet: BS 2989, ASTM A 653M, Commercial Steel, Z 180 zinc coating.

B. Stainless Steel Sheet: ASTM A 666, Type 304/Type 316.

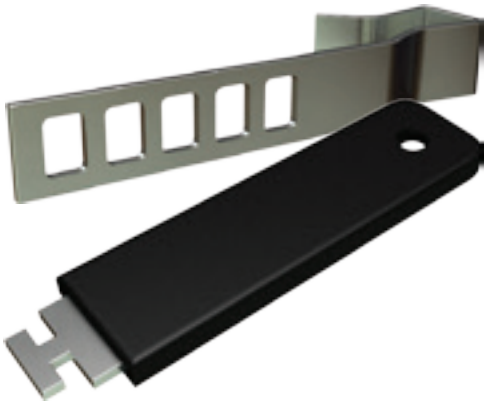




Description	Dimensions AxBxT (mm)	Material
Debonding Control Joint Flat Tie	25x150x1.5	GI (Galvanized Steel)
Debonding Control Joint Flat Tie	25x300x1.5	GI (Galvanized Steel)
Debonding Control Joint Flat Tie	25x150x3.0	GI (Galvanized Steel)
Debonding Control Joint Flat Tie	25x300x3.0	GI (Galvanized Steel)
Debonding Control Joint Flat Tie	30x150x1.5	GI (Galvanized Steel)
Debonding Control Joint Flat Tie	30x300x1.5	GI (Galvanized Steel)
Debonding Control Joint Flat Tie	30x150x3.0	GI (Galvanized Steel)
Debonding Control Joint Flat Tie	30x150x3.0	GI (Galvanized Steel)
Debonding Control Joint Flat Tie	25x150x1.5	SS A2/A4 (Stainless Steel)
Debonding Control Joint Flat Tie	25x300x1.5	SS A2/A4 (Stainless Steel)
Debonding Control Joint Flat Tie	25x150x3.0	SS A2/A4 (Stainless Steel)
Debonding Control Joint Flat Tie	25x300x3.0	SS A2/A4 (Stainless Steel)
Debonding Control Joint Flat Tie	30x150x1.5	SS A2/A4 (Stainless Steel)
Debonding Control Joint Flat Tie	30x300x1.5	SS A2/A4 (Stainless Steel)
Debonding Control Joint Flat Tie	30x150x3.0	SS A2/A4 (Stainless Steel)
Debonding Control Joint Flat Tie	30x300x3.0	SS A2/A4 (Stainless Steel)

HAMMER-ON SECTION

Available in five sizes to accommodate a steel thickness from 7mm to 25mm, this fixing is simply hammered onto the flange. It can be utilised either on a column with a tie or on a beam with an internal head restraint.



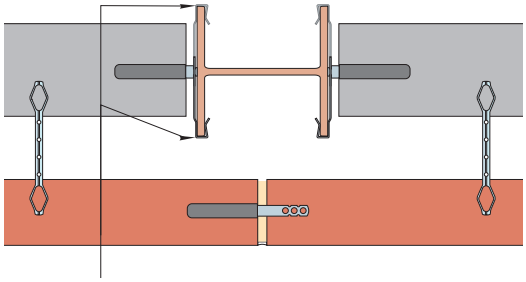
The Hammer-On Section resists load in one direction only and should be installed on alternate sides of the flange.

Hammer-On Ties should be installed at 225mm vertical centres and Hammer-On Head Restraints at 450mm horizontal centres. The wall tie or head restraint should be positioned central to the masonry leaf when located in one of the five fixing slots.

Hammer-On Tie (Debonded HOS-TIE, pictured above, supplied complete with Hammer-On Section)

Hammer-On Ties can resist a load of 900N. When fixed at 225mm vertical centres, staggered on alternate sides of the column flange (effective centres 450mm on each side) the service load will be 2kN per metre in either direction.

Hammer-On Ties installed to alternate sides of the column at 225mm vertical centres

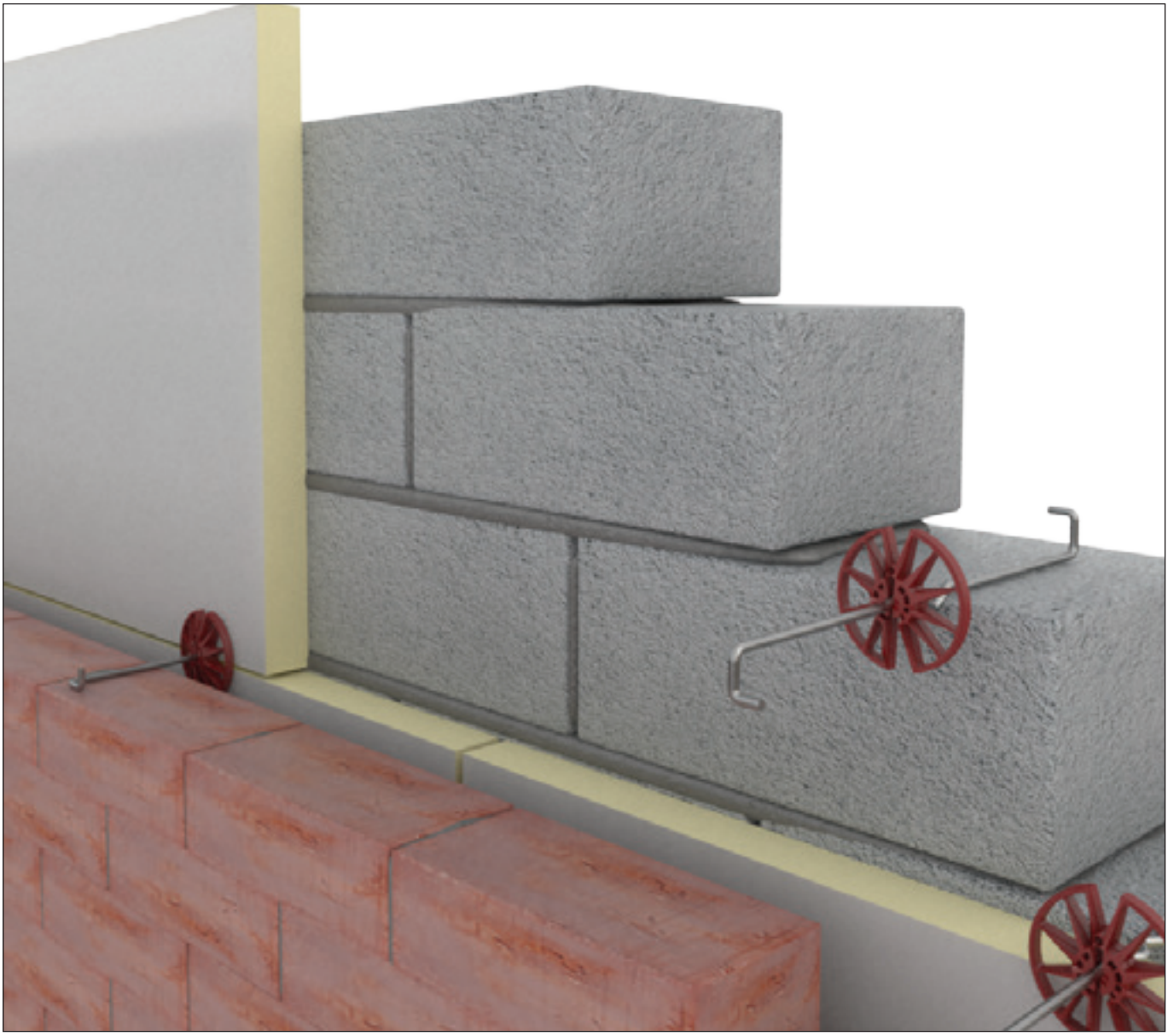


R2-TYPE WIRE TIE

Stainless steel wall tie manufactured in accordance with BS EN 845-1
- Diameter = 4mm, 5mm

Other sizes can be manufactured upon request

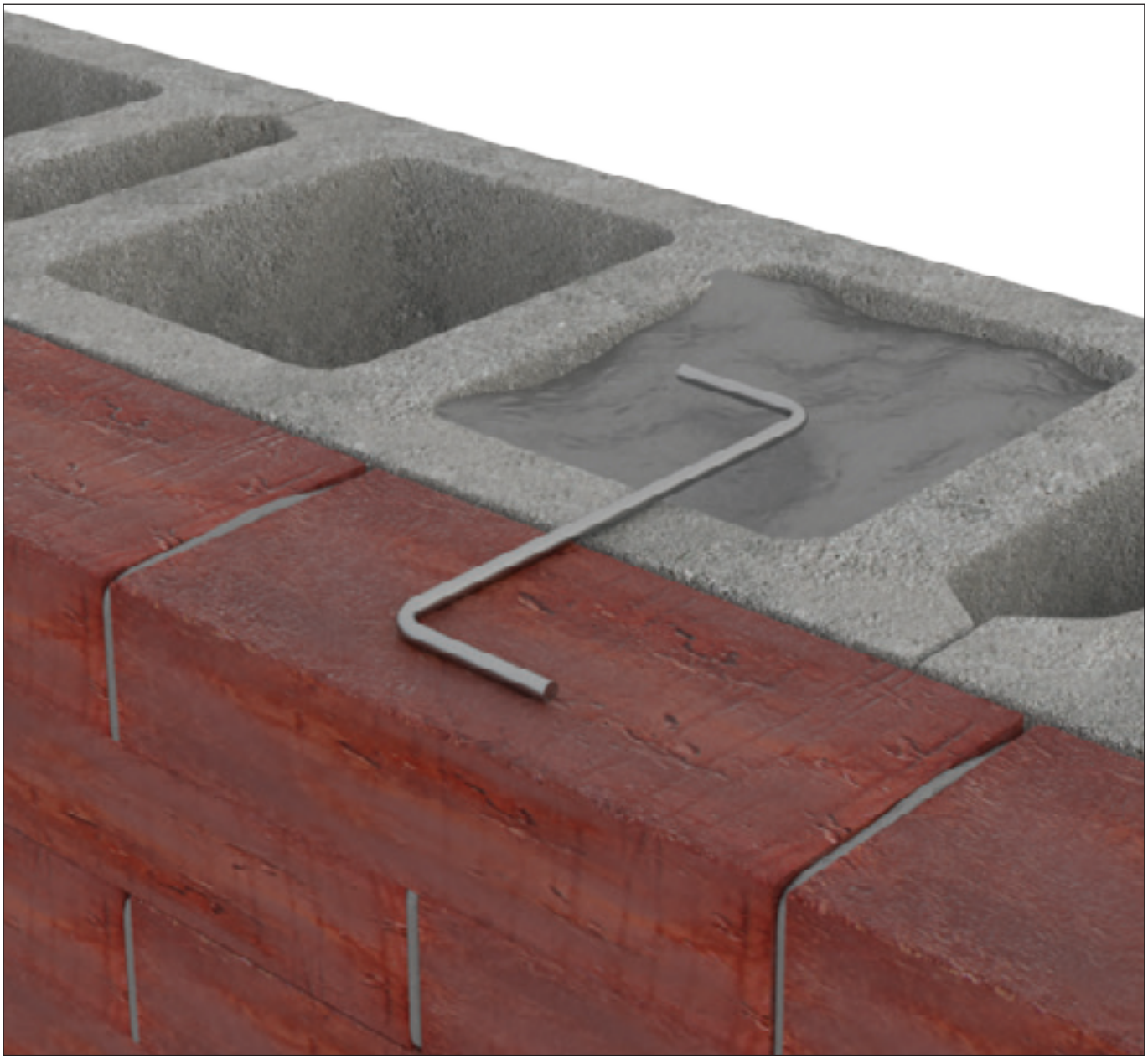
Description	Dimensions (mm)	Material
Wire Tie -Tie Drip	65x150x5.00	GI (Galvanized Steel)
Wire Tie -Tie Drip	65x200x5.00	GI (Galvanized Steel)
Wire Tie -Tie Drip	65x200x4.00	GI (Galvanized Steel)
Wire Tie -Tie Drip	65x250x4.00	GI (Galvanized Steel)
Wire Tie -Tie Drip	65x300x4.00	GI (Galvanized Steel)
Wire Tie -Tie Drip	50x200x4.00	SS A4 (Stainless Steel)
Wire Tie -Tie Drip	65x150x5.00	SS A4 (Stainless Steel)
Wire Tie -Tie Drip	65x200x5.00	SS A4 (Stainless Steel)
Wire Tie -Tie Drip	65x250x4.0	SS A4 (Stainless Steel)
Wire Tie -Tie Drip	65x300x4.00	SS A4 (Stainless Steel)



Z- TYPE WIRE TIE

-“Z” Wire Tie is used for tying masonry to masonry (Composite Wall Only).
-Not used in walls with air space and or insulation.
- Diameter = 4mm, 5mm
Other sizes can be manufactured upon request

Description	Dimensions (mm)	Material
Z-Type Wire Tie	65x200x3.00	GI (Galvanized Steel)
Z-Type Wire Tie	50x100x5.00	GI (Galvanized Steel)
Z-Type Wire Tie	65x200x4.0	GI (Galvanized Steel)



Adjustable Head Restraint (AHR)

Head Restraints

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.

Internal Head Restraint

The Internal Head is used for restraining the top of internal walls or the top of the inner leaf of a cavity wall.

The opening at the front of the channel stem is sealed to prevent mortar ingress and to ensure that vertical movement can take place between the block work and the structure.

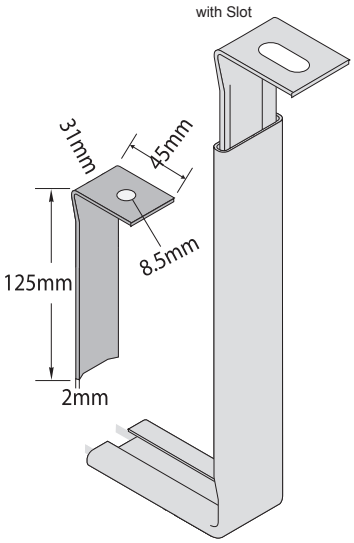
The base of the stem must be built within a bed joint with the centre of the stem no closer than 50mm from the edge of the block.

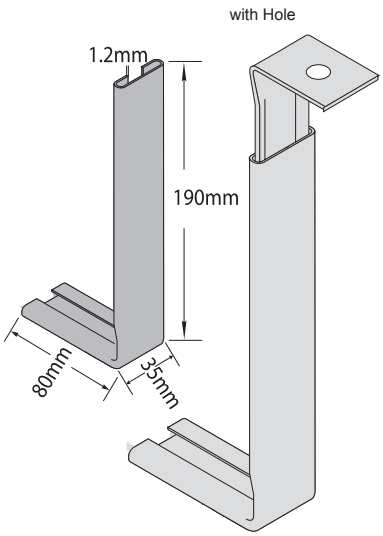
The vertical joint should be filled with mortar each side of the stem.

The maximum joint between the top of the block work and the underside of the frame is not normally greater than 25mm.

The standard of head restraint will suit a 215mm high block and can resist a load of 1.5kN*.

Where the gap at the top increases from 25mm to 50mm, the working load is reduced from 1.5kN to 1.0kN.



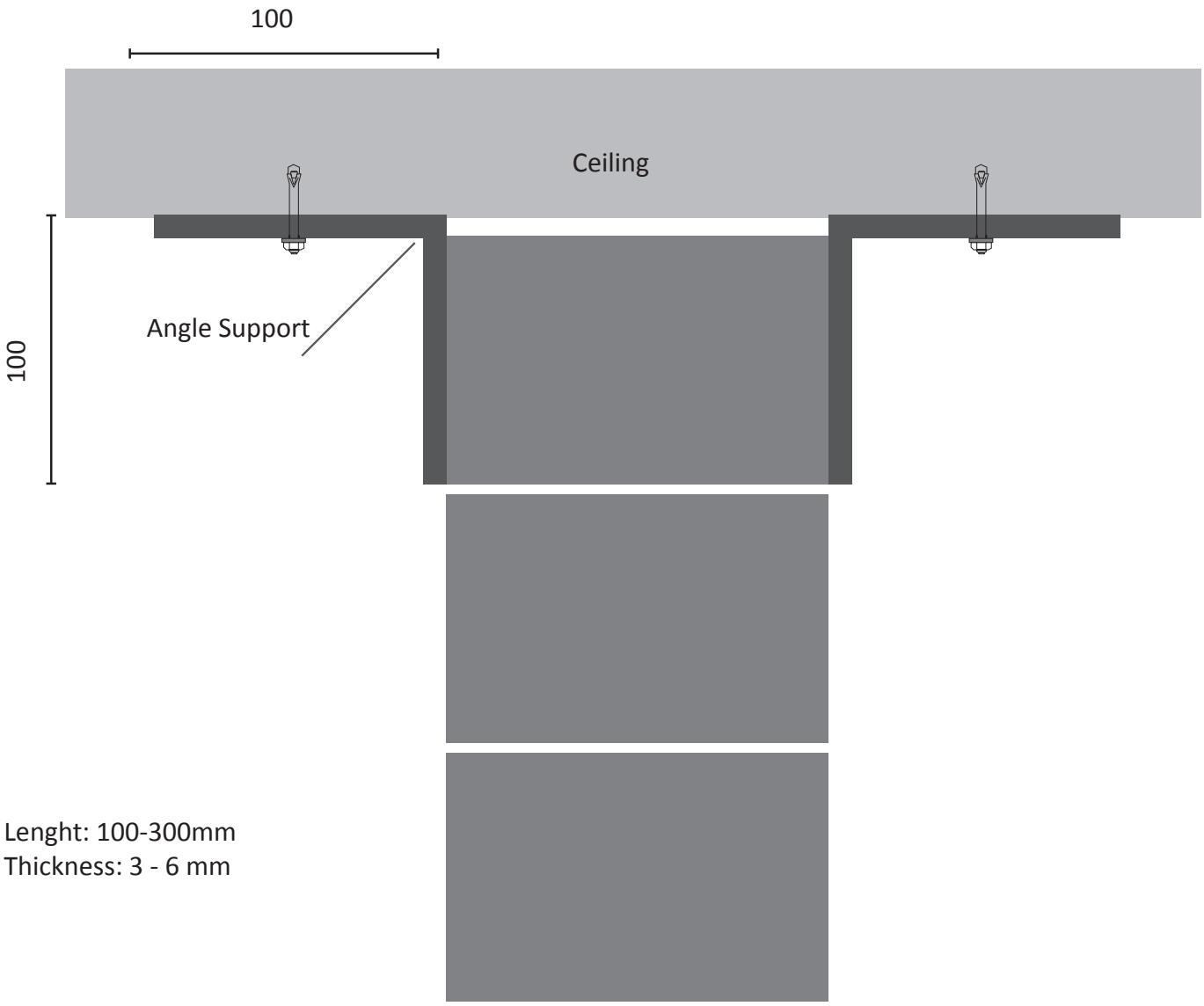


Description	Dimensions (mm)	Material
Adjustable Head Restraint	30x110x200x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x140x200x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x40x200x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x80x150x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x80x150x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x80x190x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x80x200x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x90x200x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x95x200x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x95x200x1.50	GI (Galvanized Steel)
Adjustable Head Restraint	30x200x1.20	GI (Galvanized Steel)
Adjustable Head Restraint	30x110x200x1.20	SS A4 (Stainless Steel)
Adjustable Head Restraint	30x140x200x1.20	SS A4 (Stainless Steel)
Adjustable Head Restraint	30x80x150x1.20	SS A4 (Stainless Steel)
Adjustable Head Restraint	30x80x190x1.20	SS A4 (Stainless Steel)
Adjustable Head Restraint	30x80x200x1.20	SS A4 (Stainless Steel)
Adjustable Head Restraint	30x90x200x1.20	SS A4 (Stainless Steel)
Adjustable Head Restraint	30x80x190x1.20	SS A4 (Stainless Steel)
Adjustable Head Restraint	50X22X110X60X3.0	Hot Dip Galvanized
Adjustable Head Restraint with Sleeve	25x30x100x1.5-30x200x1.2	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27x40x120x2-30x200x90x1.2	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27x45x125x1.5-30x80x190x1.2	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27x45x125x2-30x80x150x1.2	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27x80x150x2-30x100x200x1.2	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27x80x150x2-30x140x200x1.2	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	30X40X200X1.2-30X50X150X1.5	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27X45X125X2 30X80X190X1.2	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27X45X125X2 30X80X200X1.2	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27X50X125 30X80X190X1.2MM	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	27x40x120x2-30x200x90x1.2	SS A4 (Stainless Steel)
Adjustable Head Restraint with Sleeve	30x80x150x1.2 tie 30x45x150x2.0	SS A4 (Stainless Steel)
Adjustable Head Restraint with Sleeve	27x45x125x1.5-30x80x190x1.2	SS A2 (Stainless Steel)
Adjustable Head Restraint with Sleeve	30X80X190X1.2-27X45X125X1.5	SS A2 (Stainless Steel)
Adjustable Head Restraint with Sleeve	27X45X125X2 - 30X80X190X1.2	SS A2 (Stainless Steel)
Adjustable Head Restraint with Sleeve	30X200X140X1.2-27X45X125X2.0	SS A2 (Stainless Steel)
Adjustable Head Restraint with Sleeve	30X200X110X1.2-27X80X150X2.0	SS A2 (Stainless Steel)
Adjustable Head Restraint with Sleeve	30X200X80X1.2-27X45X125X2.0	SS A2 (Stainless Steel)
Adjustable Head Restraint with Sleeve	30X200X110X1.2-27X80X150X2.0	GI (Galvanized Steel)
Adjustable Head Restraint with Sleeve	30X200X110X1.2MM-27X80X150X2.0	Hot Dip Galvanized

Partition Top Angle (PTA)

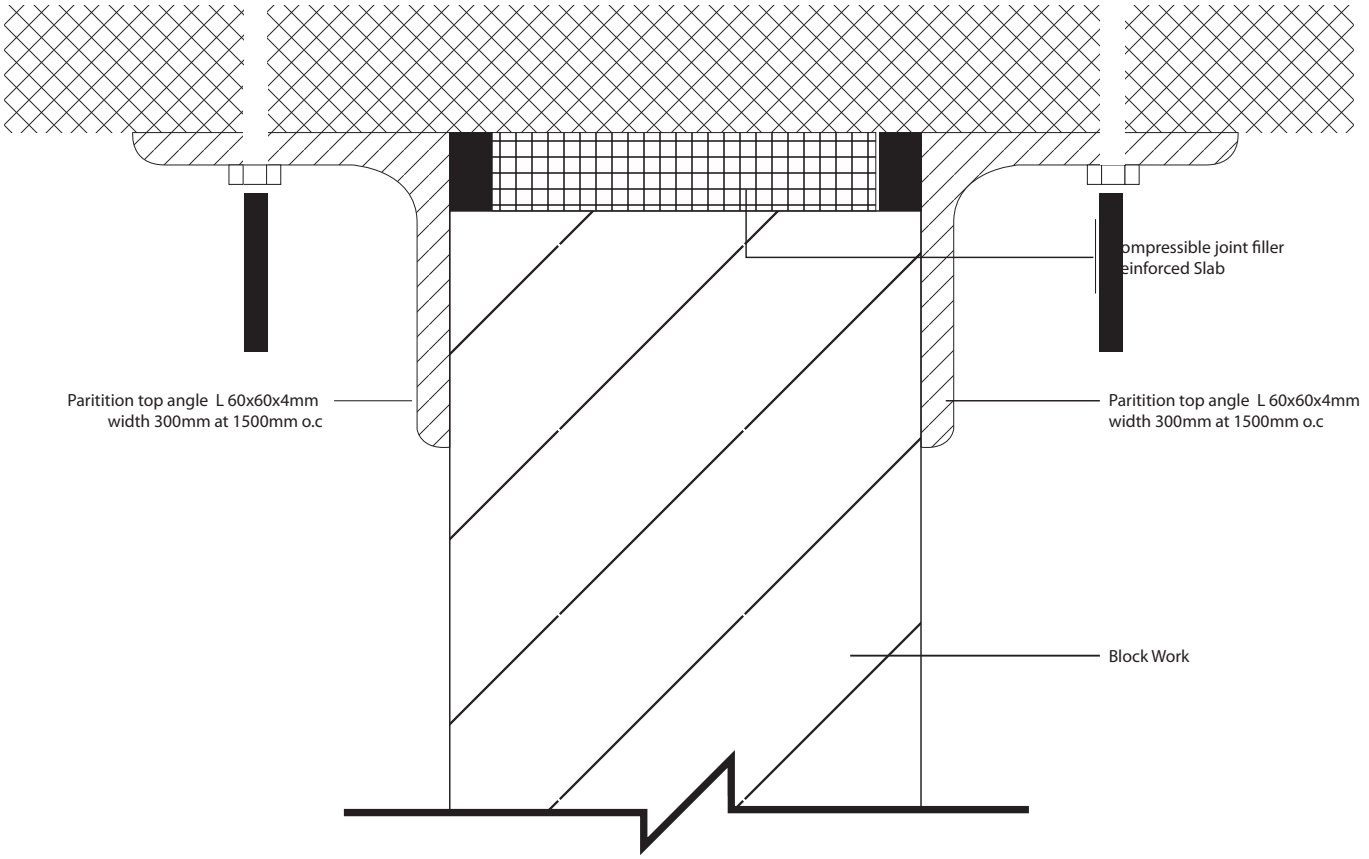
Angle Support

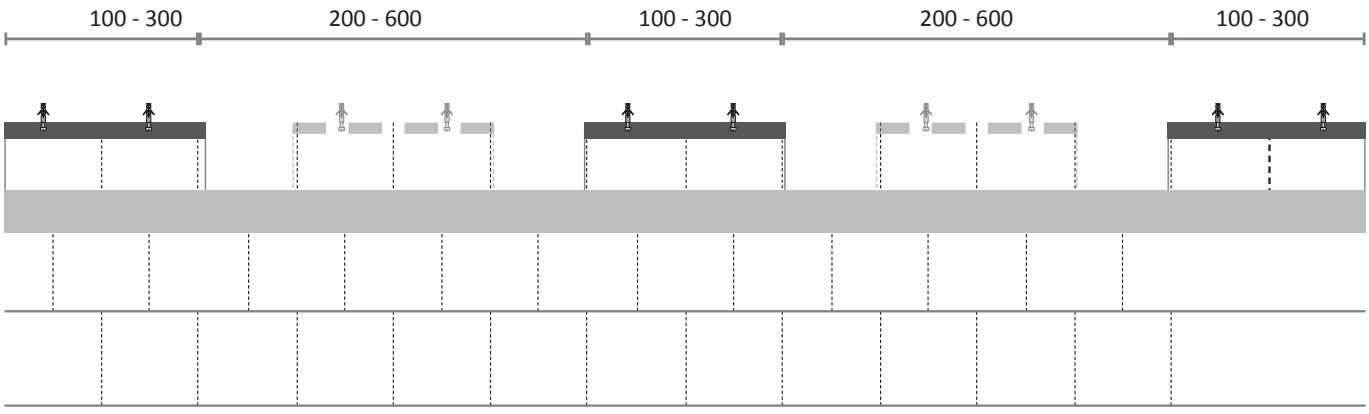
- Partition Top angle prevents a horizontal movement of the masonry wall.
- Supports the horizontal force on top of the block work due to human impact or wind pressure.
- To be fixed on both sides of the wall.
- To be fixed with 2x M6 Screw with plastic anchor.
- Provides support while preventing a solid connection between the wall and the ceiling.



Lenght: 100-300mm
Thickness: 3 - 6 mm

Description	Dimensions (mm)	Material
Block Tie	25x75x200x1.80	GI (Galvanized Steel)
Block Tie	30x75x250x2.00	GI (Galvanized Steel)
Block Tie	30x75x250x2.00	SS A4 (Stainless Steel)





PARTITION TOP ROD ANCHORS (PTRA)

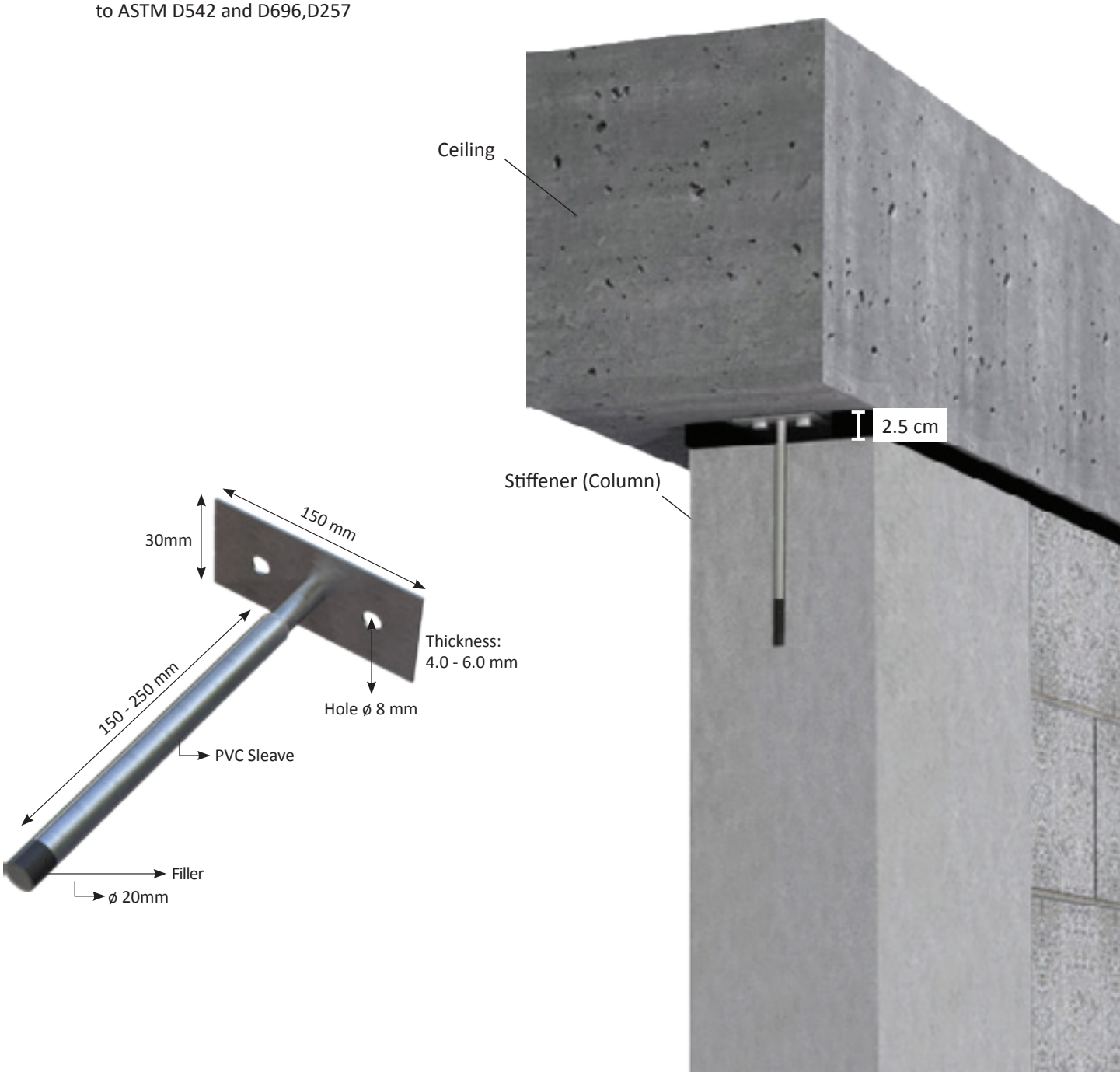
Partition Top Anchors have been developed to provide lateral shear resistance at the upper limit of masonry walls. They permit vertical deflection of the slab above, without transferring compressive loads to the masonry wall below. Partition Top Anchors are suitable for construction using steel.
Partition Top Anchors Tube with expansion filler is placed over rod anchor, which has been attached to concrete or steel by any of the methods illustrated.

Materials:

ASTM A 1008 (cold- rolled)
ASTM A1011 (Hot-rolled)

Finishes:

Hot Dip Galvanized –ASTM A153
ROD
Hot-Dip Galvanized ASTM A153
Plastic Tube : Manufactured from UPVC according to ASTM D542 and D696,D257

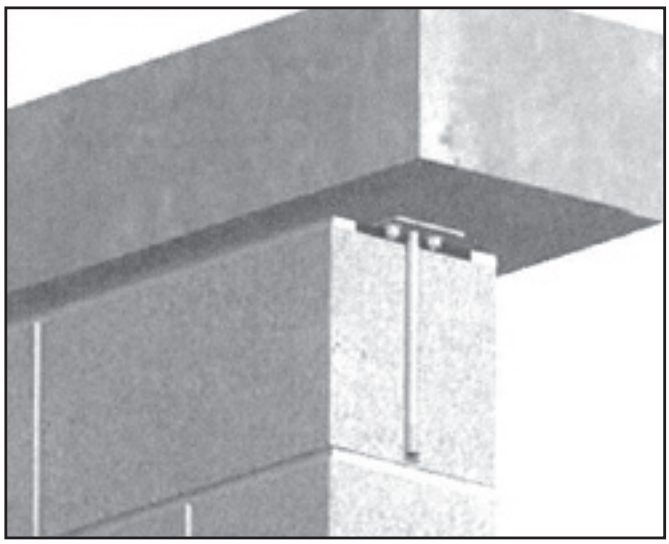


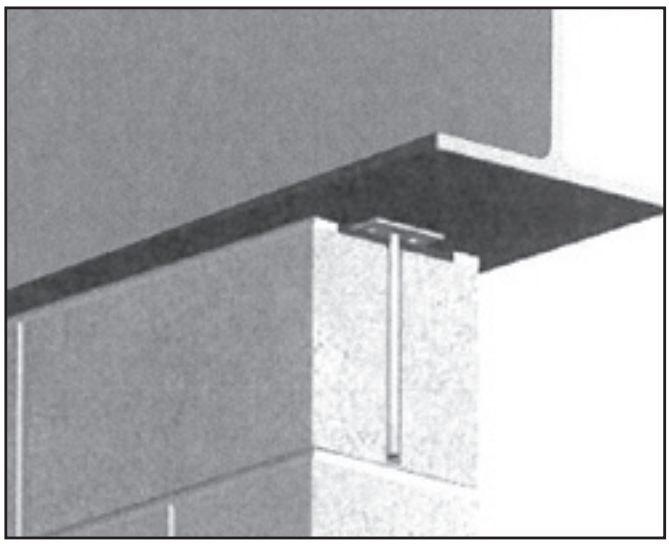
Partition Top Anchors have been developed to provide lateral shear resistance at the upper limit of masonry walls.

They permit vertical deflection of the slab above, without transferring compressive loads to the masonry wall below.

PTA are suitable for construction using steel or concrete.

PTA Tube with expansion filler is placed over rod anchor, which has been attached to concrete or steel by any of the methods illustrated.





Finishes:

Sheet Metal:
Hot-Dip Galvanized - ASTM A153/A153M-B2 class B (sheet metal ties and anchors hot-dip galvanized after fabrication)

Sheet Metal (Stainless Steel):
ASTM A167 - AISI Type 304 Stainless Steel (sheet metal ties and anchors) (Yype 316 available on special order)

Rod:
Hot-Dip Galvanized - ASTM A153/A153M-B2 Stainless Steel Type 304 - ASTM A582/A582MPTA Tube: Manufactured from Clear Butyrate.

Dimensions:
- Rod 9.5 mm lenght 150mm Other diameters and gauges available
- Plate 50 x 75mm thickness 2.5mm

SURE - TIE FOR STEEL

Sure-Tie quickly and accurately pierces insulation and/or wallboard to abut steel/studs in brick veneer applications.

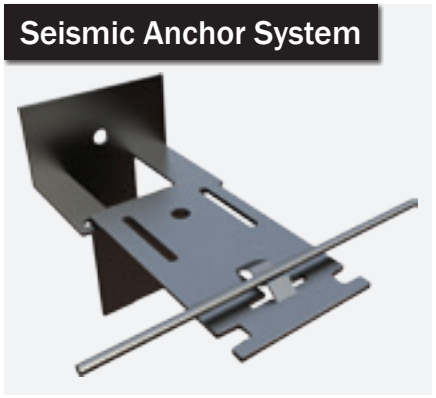
- One-piece design provides superior strength.
- 12-24 Self Driller.
- Accommodates 1/2“ and 5/8“ wall board and various thicknesses of insulation.
- Silver-Gray Climaseal® finish resulted in 0% red rust at 1000 hours exposure to ASTM B-117 salt spray testing.

Triangle Wire Tie

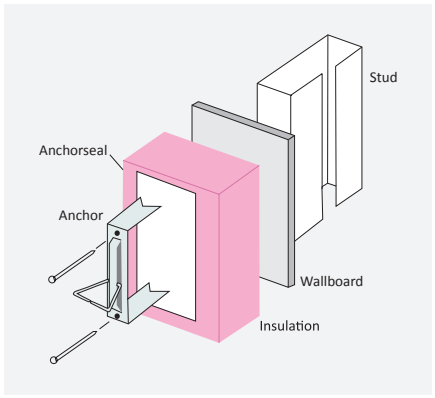
Seismic Wire Tie

Single Wire Tie

Seismic Anchor System



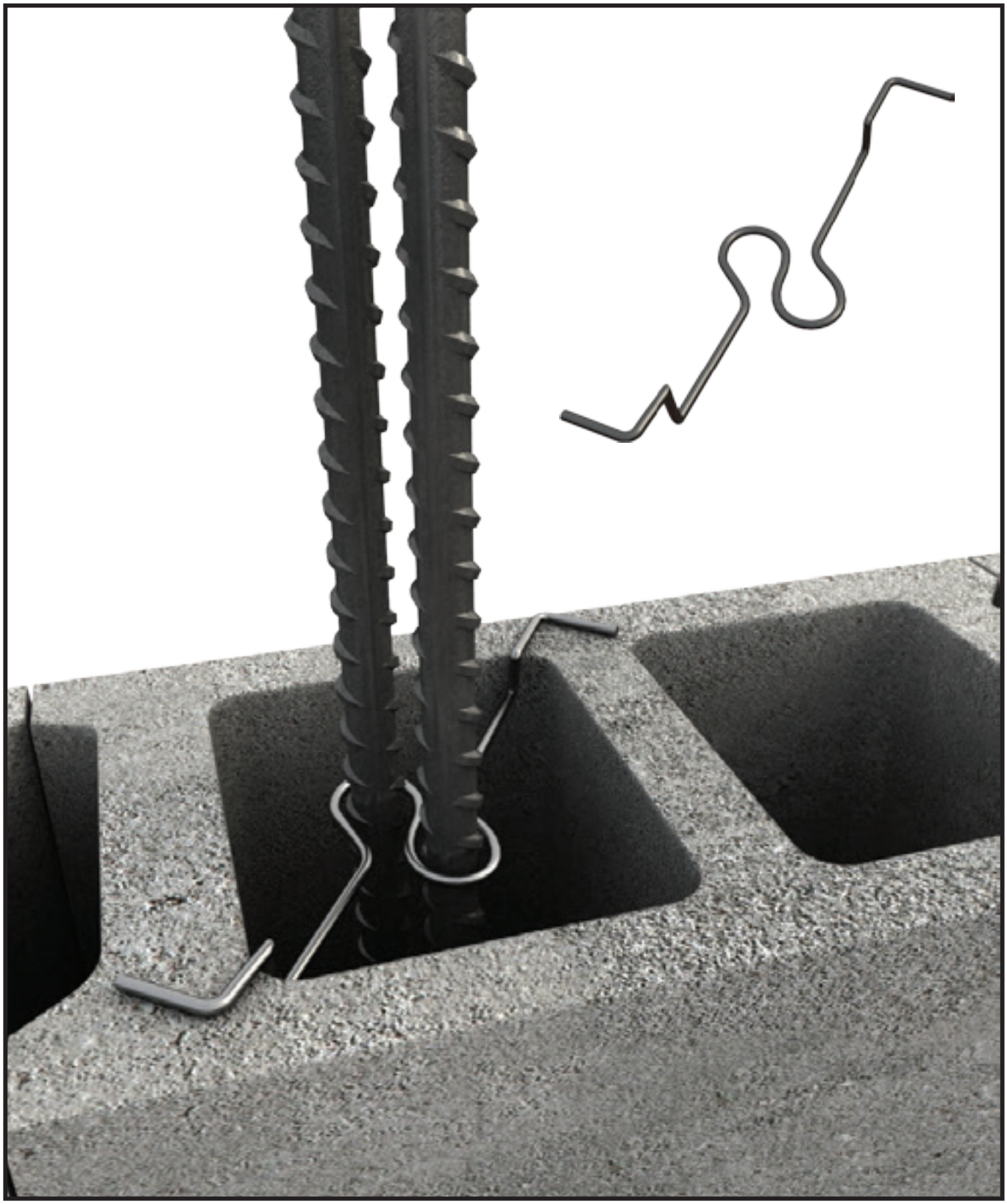
Stud Anchor



REBAR POSITIONERS

Rebar Postioners
RB Rebar Positioners are for positioning and stabilizing rebars installed into concrete block cores in reinforced masonry.

TWIN Rebar Postioners
TWIN Rebar Positioners are similar to the standard RB model but with double loops to hold 4 rebars.



BLOCK WALL REINFORCEMENT

BLOCK LADDER REINFORCEMENT

SFSP ladder and truss types are used for the reinforcement of brick and block masonry to give improved tensile strength to walls subjected to lateral loading e.g. wind and seismic.

SFSP block reinforcements reduces the risk of cracking either at stress concentration around opening. Calculations are provided by our design office in Stuttgart, Germany.

SPECIFICATIONS

SFSP reinforcement truss type are manufactured by resistance welding of ASTM A82 cold drawn steel wire deformed at predetermined centers conforming to BS 4483:2005.

DIMENSIONS

• Hot-dip galvanized.
- Main wire diameter = 4.0 mm 4.8 mm
- Rung and diagonal wire diameter = 4.0 mm 4.8 mm
- Rung wire centers = 400 mm

• Stainless steel AISI 304
- Main wire diameter = 4.0 mm 4.8 mm
- Rung and diagonal wire diameter = 4.0 mm 4.8 mm
- Round wire centers = 400 mm

The production of cold reduced steel wires complies to BS 4483:2005 and ASTM A951 / A951M - 11 Standard Specification for Steel Wire for Masonry Joint Reinforcement

a) Mechanical Properties
- Specified characteristic strength: 460 N/mm^2 (Mpa)
- Tensile strength min 510 N/mm^2 (Mpa)

b) Chemical composition of steel
- Carbon C max. 0,25 %, Sulphur S:max 0.06 %
- Carbon equivalent value Ceq: max 0.4 %, Ceq=C+Mn/6+ (Cr + V + Mo)/5+ (Cu x Ni)/15

SFSP Block ladder (Ladder type and Truss type) are continuous lengths of joint reinforcement that are embedded into the horizontal joints of masonry walls.

Block reinforcement offers the following benefits:
- Increases lateral flexural strength.
- Reduces cracking that can arise from thermal stresses.
- Bonds exterior and interior masonry withes together in composite or cavity walls.
- Bonds masonry at intersecting walls and corners.
- Increases performance of masonry wall under various stresses

LADDER TYPE

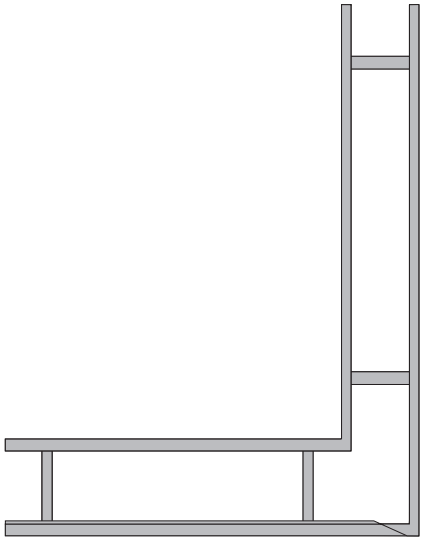
Description	Type	Dimensions (mm)	Length (mm)	Material
Block Ladder - Ladder Type	T Shape	100x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	150x4.0/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	150x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	175x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	200x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	200x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	225x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	250x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	Overlap	250x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	50x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	50x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	T Shape	75x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Ladder Type	Overlap	100x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	100x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	100x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	100x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	150x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	150x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	150x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	150x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	175x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	175x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	200x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	200x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	200x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	200x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	225x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	225x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	250x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	250x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	250x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	250x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	50x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	50x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	50x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	50x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	75x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	75x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	T Shape	50x4.00/400	3000	Hot Dip Galvanized

Description	Type	Dimensions (mm)	Length (mm)	Material
Block Ladder - Ladder Type	Overlap	100x4.0/400	3000	Hot Dip Galvanized
Block Ladder - Ladder Type	Overlap	100x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	100x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	150x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	150x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	200x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	200x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	200x5.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	250x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	50x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	50x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	50x5.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	100x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	100x5.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	150x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	200x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	200x5.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	250x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	250x5.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	50x4.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Truss Type	T Shape	50x5.00/400	3000	SS A4 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	100x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	100x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	150x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	150x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	150x5.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	200x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	200x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	200x5.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	250x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	50x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	T Shape	50x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Ladder Type	Overlap	50x5.00/400	3000	SS A6 (Stainless Steel)

Accessories

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

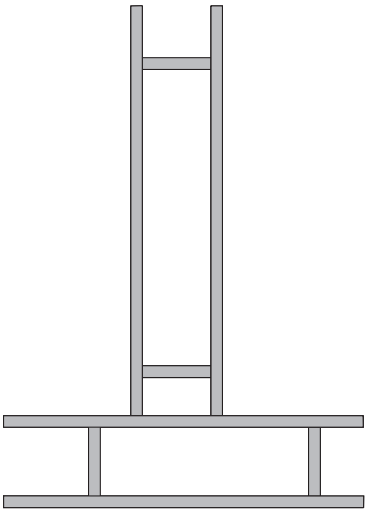
L - Junction Ladder



Description	Type	Dimensions (mm)	Material
Ladder 90D - Accessory	Overlap	100x4.00/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	100x5.00/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	150x400/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	150x500/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	200x4.00/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	200x5.00/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	250x4.00/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	250x5.00/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	50x4.00/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	50x5.00/400	GI (Galvanized Steel)
Ladder 90D - Accessory	Overlap	100x4.00/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	100x5.00/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	150x400/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	150x500/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	200x4.00/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	200x5.00/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	250x4.00/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	250x5.00/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	50x4.00/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	50x5.00/400	Hot Dip Galvanized
Ladder 90D - Accessory	Overlap	100x4.00/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	100x5.00/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	150x400/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	150x500/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	200x4.00/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	200x5.00/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	250x4.00/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	250x5.00/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	50x4.00/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	50x5.00/400	SS A4 (Stainless Steel)
Ladder 90D - Accessory	Overlap	100x4.00/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	100x5.00/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	150x400/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	150x500/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	200x4.00/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	200x5.00/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	250x4.00/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	250x5.00/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	50x4.00/400	SS A6 (Stainless Steel)
Ladder 90D - Accessory	Overlap	50x5.00/400	SS A6 (Stainless Steel)

Description	Type	Dimensions (mm)	Material
Equal T-Branch - Accessory	Overlap	100x4.00/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	100x5.00/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	150x400/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	150x500/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	200x4.00/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	200x5.00/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	250x4.00/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	250x5.00/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	50x4.00/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	50x5.00/400	GI (Galvanized Steel)
Equal T-Branch - Accessory	Overlap	100x4.00/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	100x5.00/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	150x400/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	150x500/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	200x4.00/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	200x5.00/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	250x4.00/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	250x5.00/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	50x4.00/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	50x5.00/400	SS A4 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	100x4.00/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	100x5.00/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	150x400/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	150x500/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	200x4.00/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	200x5.00/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	250x4.00/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	250x5.00/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	50x4.00/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	50x5.00/400	SS A6 (Stainless Steel)
Equal T-Branch - Accessory	Overlap	100x4.00/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	100x5.00/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	150x400/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	150x500/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	200x4.00/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	200x5.00/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	250x4.00/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	250x5.00/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	50x4.00/400	Hot Dip Galvanized
Equal T-Branch - Accessory	Overlap	50x5.00/400	Hot Dip Galvanized

T - Junction Ladder



TRUSS TYPE

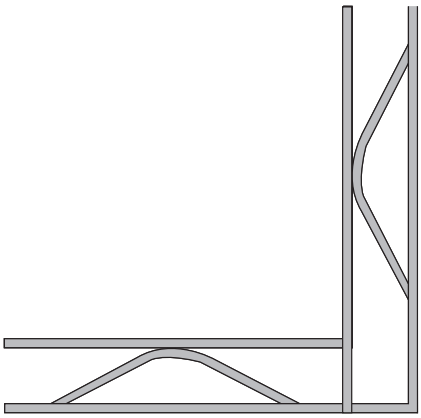
Description	Type	Dimensions (mm)	Length (mm)	Material
Block Ladder - Truss Type	T-Shape	100x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	100x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	150x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	150x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	200x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	200x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	250x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	250x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	50x4.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	50x5.00/400	3000	GI (Galvanized Steel)
Block Ladder - Truss Type	T-Shape	100x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	100x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	150x400/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	150x500/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	200x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	200x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	250x4.00/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	250x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	50x5.00/400	3000	Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	150x400/400	3000	MS Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	200x4.00/400	3000	MS Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	250x4.00/400	3000	MS Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	50x4.00/400	3000	MS Hot Dip Galvanized
Block Ladder - Truss Type	T-Shape	75x4.00/400	3000	MS Hot Dip Galvanized
Block Ladder - Truss Type	Overlap	100x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Truss Type	T-Shape	100x5.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Truss Type	T-Shape	150x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Truss Type	T-Shape	150x5.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Truss Type	T-Shape	200x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Truss Type	T-Shape	200x5.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Truss Type	T-Shape	250x4.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Truss Type	T-Shape	250x5.00/400	3000	SS A6 (Stainless Steel)
Block Ladder - Truss Type	T-Shape	50x400/400	3000	SS A6 (Stainless Steel)

Accessories

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

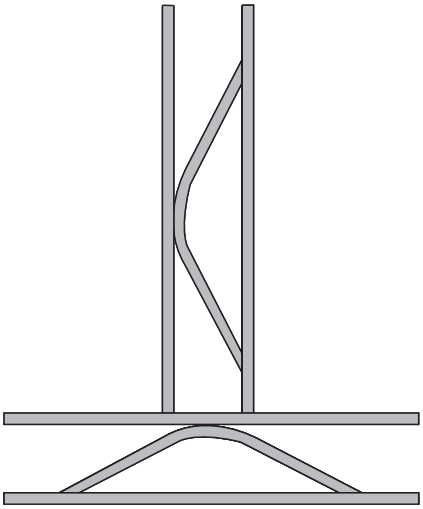
Description	Type	Dimensions (mm)	Material
90D - Truss Accessory	T-Shape	100x4.00/400	GI (Galvanized Steel)
90D - Truss Accessory	T-Shape	150x4.00/400	GI (Galvanized Steel)
90D - Truss Accessory	T-Shape	200x4.00/400	GI (Galvanized Steel)
90D - Truss Accessory	T-Shape	50x4.00/400	GI (Galvanized Steel)
90D - Truss Accessory	T-Shape	150x4.00/400	MS Hot Dip Galvanized
90D - Truss Accessory	T-Shape	50x4.00/400	MS Hot Dip Galvanized

L - Junction Truss



Description	Type	Dimensions (mm)	Material
Equal Tee - Truss Accessory	Overlap	100x4.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	100x5.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	150x4.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	150x5.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	200x4.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	200x5.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	250x4.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	250x5.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	50x4.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	Overlap	50x5.00/400	Hot Dip Galvanized
Equal Tee - Truss Accessory	T-Shape	100x4.00/400	GI (Galvanized Steel)
Equal Tee - Truss Accessory	T-Shape	150x4.00/400	GI (Galvanized Steel)
Equal Tee - Truss Accessory	Overlap	150x5.00/400	GI (Galvanized Steel)
Equal Tee - Truss Accessory	T-Shape	200x4.00/400	GI (Galvanized Steel)

T - Junction Truss



PULLOUT BOX

The GI Pullout Box is supplied in retainer boxes made from galvanized sheet steel, for the reliable transmission of shear forces. The GI Pullout Box, designed to ensure the exact distance between rods, in which the holes are made slightly bigger than the rod diameter.

Material Used: Galvanized sheet, different zinc coatings.
Gi Pullout Box Length: 1.2m, 2.44m, 3m (other length can be manufactured upon request.)
Gi Pullout Box Width: 100mm – 400mm (other widths, smaller or larger can be arranged.)
Hole Diameter: 10mm – 25mm (other punching required, can be done.)
Material Thickness: 0.4mm – 1.5mm as standard (other thicknesses can be manufactured upon request)
Covers: According to the requirements.

Description	Dimensions (mm)	Material
Pull Out Bar Box	200x30-30x0.80x1200	GI (Galvanized Steel)
Pull Out Bar Box	200x30-30x0.80x1200	GI (Galvanized Steel)
Pull Out Bar Box	200x30-30x0.80x1200	GI (Galvanized Steel)
Pull Out Bar Box	200x35-35x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Box	200x35-35x0.70x1200	GI (Galvanized Steel)
Pull Out Bar Box	200x35-35x0.80x1000	GI (Galvanized Steel)
Pull Out Bar Box	200x35-35x0.80x1200	GI (Galvanized Steel)
Pull Out Bar Box	200x40-40x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Box	215x40-40x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Box	250x35-35x0.70x1200	GI (Galvanized Steel)
Pull Out Bar Box	250x35-35x0.80x1000	GI (Galvanized Steel)
Pull Out Bar Box	250x35-35x0.80x1200	GI (Galvanized Steel)
Pull Out Bar Box	260x35-35x0.80x1000	GI (Galvanized Steel)
Pull Out Bar Box	260x35-35x0.80x1200	GI (Galvanized Steel)
Pull Out Bar Box	280x35-35x0.70x1200	GI (Galvanized Steel)
Pull Out Bar Box	290x25-25x0.8x2000	GI (Galvanized Steel)
Pull Out Bar Box	290x35-35x0.9x1500	GI (Galvanized Steel)
Pull Out Bar Box	290x35-35x0.9x1600	GI (Galvanized Steel)
Pull Out Bar Box	290x35-35x0.9x1800	GI (Galvanized Steel)
Pull Out Bar Box	290x35-35x0.9x2100	GI (Galvanized Steel)
Pull Out Bar Box	300x35-35x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Box	300x35-35x0.70x1200	GI (Galvanized Steel)
Pull Out Bar Box	300x35-35x0.80x1200	GI (Galvanized Steel)
Pull Out Bar Box	325x35-35x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Box	350x35-35x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Box	400x35-35x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Box	450x35-35x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Box	475x35-35x0.90x1000	GI (Galvanized Steel)
Pull Out Bar Box	75x35-35x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Box	298x34-34x0.70	GI (Galvanized Steel)
Pull Out Bar Cover	323x34-34x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Cover	348x34-34x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Cover	398x34-34x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Cover	448x34-34x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Cover	198x30-30x0.70x1200	GI (Galvanized Steel)
Pull Out Bar Cover	198x34-34x0.70x1200	GI (Galvanized Steel)
Pull Out Bar Cover	288x34-34x0.8x1500	GI (Galvanized Steel)
Pull Out Bar Cover	288x34-34x0.8x1600	GI (Galvanized Steel)
Pull Out Bar Cover	288x34-34x0.8x1800	GI (Galvanized Steel)
Pull Out Bar Cover	288x34-34x0.8x2100	GI (Galvanized Steel)
Pull Out Bar Cover	473x34-34x0.80x1000	GI (Galvanized Steel)

Description	Dimensions (mm)	Material
Pull Out Bar Cover	498x34-34x0.90x1000	GI (Galvanized Steel)
Pull Out Bar Cover	198x34-34x0.70x1000	GI (Galvanized Steel)
Pull Out Bar Cover	198x34-34x0.80x1000	GI (Galvanized Steel)
Pull Out Bar Box	180x40x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Box	220x40x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Box	280x40x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Cover	178x39x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Cover	218x39x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Cover	218x40x0.70x2400	GI (Galvanized Steel)
Pull Out Bar Cover	278x39x0.70x2400	GI (Galvanized Steel)
Pull Out Bar SET	250x35-35x0.80x1000	GI (Galvanized Steel)
Pull Out Bar SET	250x35-35x0.80x1200	GI (Galvanized Steel)
Pull Out Bar SET	260x35-35x0.80x1000	GI (Galvanized Steel)

SFSP makes every effort to maintain the accuracy and quality of the information provided in this Catalogue.

However, SFSP cannot guarantee and assumes legal liability or responsibility for the accuracy or completeness of the information provided.

Whilst every care has been exercised in the preparation of this catalogue to ensure that any advice, recommendations or information is accurate, no liability or responsibility of any kind is accepted.

Project working details should be entrusted to appropriately qualified and experienced persons, case by case.

With a policy of continuous product development, SFSP may modify product design and specification without due notice.

In case of any questions or remarks, feel free to contact the R&D Department.