



Catnic

Building Components Technical Guide

June 2005



Corus

An international company with steel at the heart of its strategic focus, Corus has many operations worldwide and is united by a strong corporate brand. The Corus logo is a symbol of confidence and a mark of quality and service.

Corus is focused on achieving sustainable profitability, offer an unrivalled customer service package and places the highest value on the health, safety and well being of its employees and customers.

Catnic

Catnic has pioneered the steel lintel for more than three generations designing, manufacturing and supplying the construction industry with technically superior products. Catnic's reputation has been earned through constant technical innovation and leading the UK lintel market.

Catnic is committed to providing the building industry with new and improved products, borne from investment in design and manufacturing technologies. This brochure gives an overview of our Building Components product range along with technical specification data.

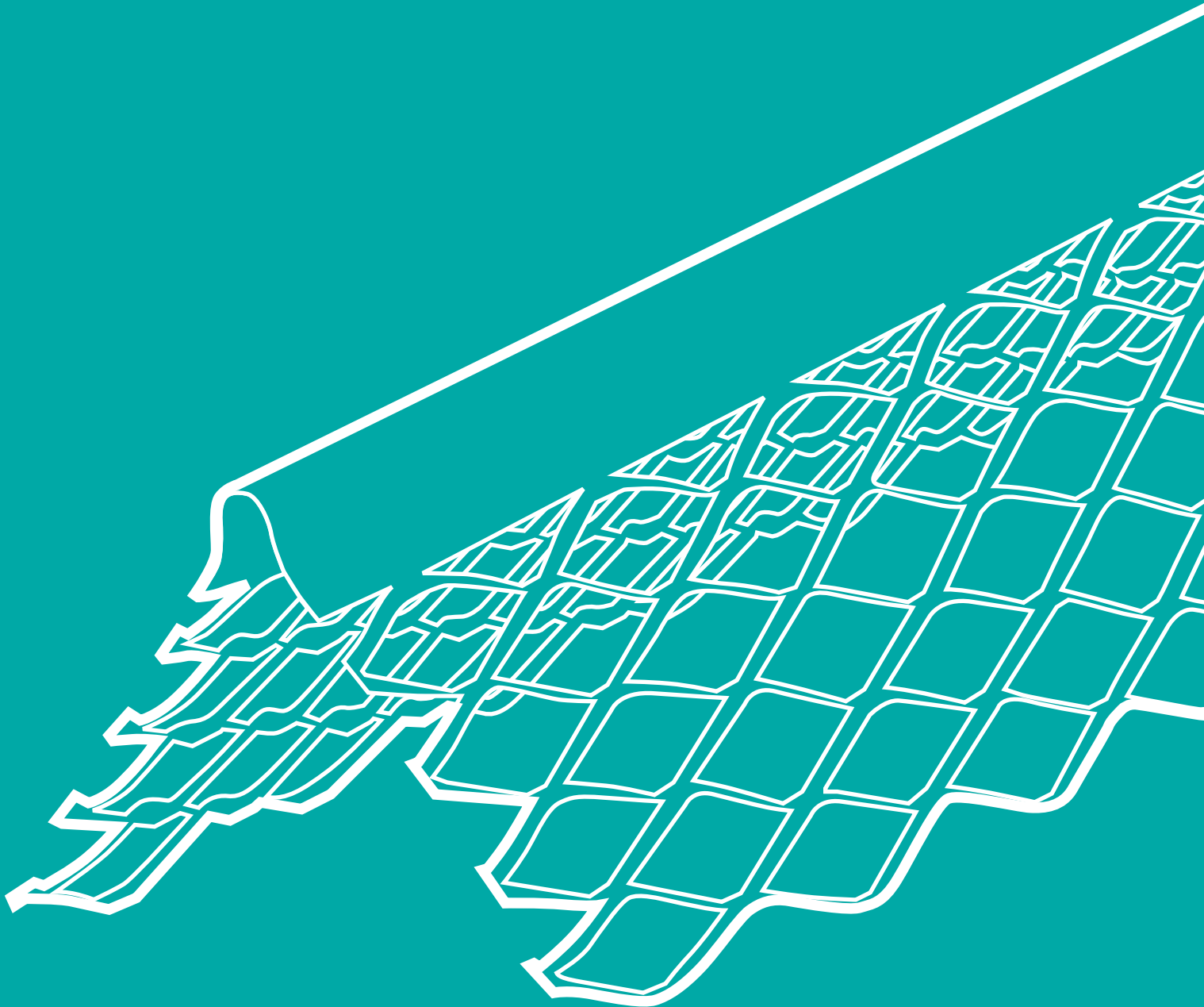
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Steel Plasterer's Beads

Our comprehensive range of Steel Plasterer's Beads are precision engineered and simple to use. Fixing by nail or plaster dab is straightforward and fast, generating arises, edges, corners and joints that are easy to form and resistant to chipping, cracking and impact damage.



With one of the widest ranges of beads available, **Catnic** offers freedom of choice to satisfy both the aesthetic & technical requirements of modern building design as well as the needs of traditional repair and maintenance work.

Material

Galvanised steel to BSEN 10327-DX51D+Z275.
Austenitic stainless steel to BSEN 10088-2-1.4301 for external applications.

Specification

All metal beads comply with the British Standards, Beads for Internal Plastering and Drylining BS 6452 Part 1:1984.

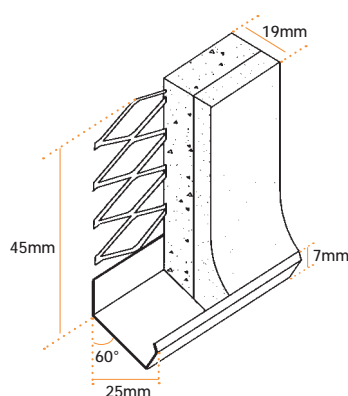
Wet Plaster and External Render Applications

Render Stop Bead

Used to obtain a neat, bell cast lower edge to external render finishes. This profile has excellent damage resistance qualities and gives good protection to masonry against run-off water. Available in Galvanised Steel for moderate to sheltered conditions and Stainless Steel for exposed conditions.

Code	Qty /Box	Length (mm)	Use
RS3.0	50	3000	(E)
RS3.0SS	10 or 50	3000	(E)

Stainless Steel products suffixed 'SS'.



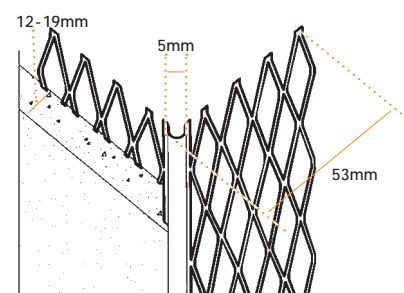
Plaster depth – 16-19mm
Flange width – 45mm
Galvanized Steel to
BSEN 10327-DX51D+Z275
Stainless Steel to BSEN 10088-2-1.4301

Standard Angle Bead (53mm Flange)

Designed for two and three coat applications, Standard Angle Bead forms strong and accurate corners resistant to chipping and cracking. Available in Galvanised Steel for internal applications. Available in Stainless Steel for external use and high condensation and moisture areas.

Code	Qty /Box	Length (mm)	Use
STD2.4	50	2400	(I)
STD3.0	50	3000	(I)
STD3.0 SS	10 or 50	3000	(E)

Stainless steel products suffixed 'SS'.



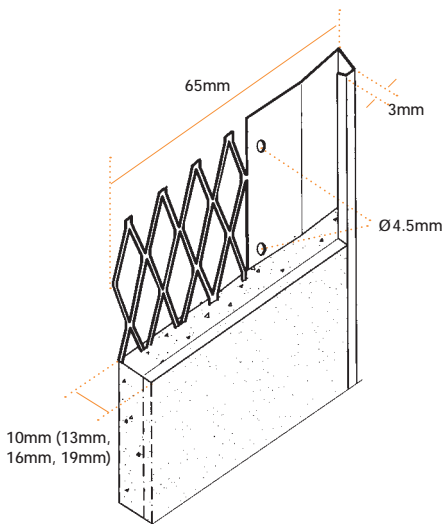
Plaster depth – 12-19mm
Flange width – 53mm
Galvanized Steel BSEN 10327-DX51D+Z275
Stainless Steel to BSEN 10088-2-1.4301

Plaster Stop Bead

Provides clean, neat edges to two coat plaster/render work at openings or abutments onto other wall surfaces or ceiling finishes. Galvanised for internal applications, Stainless Steel for external use and high condensation and moisture areas.

Code	Qty /Box	Length (mm)	Plaster depth	Use
PS10/2.4	50	2400	10mm	I
PS10/3.0	50	3000	10mm	I
PS13/2.4	50	2400	13mm	I
PS13/3.0	50	3000	13mm	I
PS16/3.0	50	3000	16mm	I
PS19/3.0	50	3000	19mm	I
PS10/3.0/SS	10 or 50	3000	10mm	E
PS13/3.0/SS	10 or 50	3000	13mm	E
PS16/3.0/SS	10 or 50	3000	16mm	E
PS19/3.0/SS	10 or 50	3000	19mm	E

Stainless steel products suffixed 'SS'.



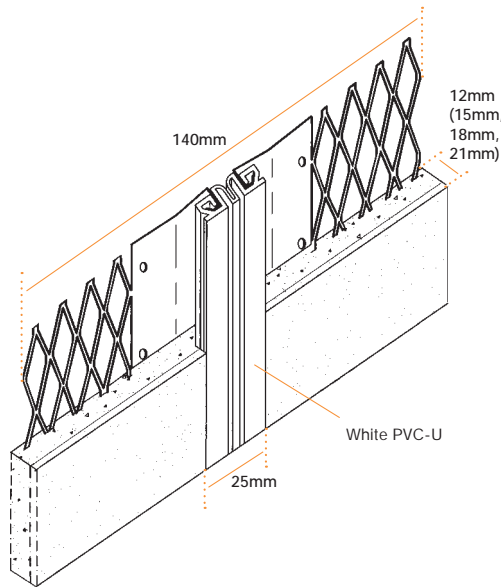
PS 13, 16, 19 dimensions in brackets.
 Plaster depth – 10mm, 13mm, 16mm, 19mm
 Flange width – 65mm
 Galvanized Steel to BSEN 10327-DX51D+Z275
 Stainless Steel to BSEN 10088-2-1.4301

Movement Bead

The function of this bead is to allow for movement between adjoining surface finishes resulting from differential expansion or settlement. Allowable movement is ±3mm. Galvanised for internal applications, Stainless Steel for external use and high condensation and moisture areas.

Code	Qty /Box	Length (mm)	Plaster depth	Use
MB10/3.0 x10	10	3000	12mm	I
MB13/3.0 x10	10	3000	15mm	I
MB16/3.0 x10	10	3000	18mm	I
MB19/3.0 x10	10	3000	21mm	I
MB10/3.0/SS x10	10	3000	12mm	E
MB13/3.0/SS x10	10	3000	15mm	E
MB16/3.0/SS x10	10	3000	18mm	E
MB19/3.0/SS x10	10	3000	21mm	E

Stainless steel products suffixed 'SS'.
 All Movement Bead made to order.



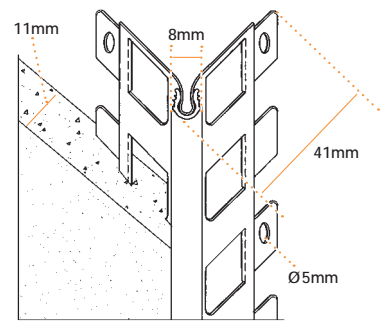
MB 13, 16, 19 dimensions in brackets.
 Plaster depth – 12mm, 15mm, 18mm, 21mm
 Flange width – 65mm
 Galvanized Steel to BSEN 10327-DX51D+Z275
 Stainless Steel to BSEN 10088-2-1.4301

PVC Nose Punched Wing

A rigid and durable profile with the added benefit of a PVC-U nose which provides excellent edge protection for vulnerable corners where a high quality finish needs to be maintained despite heavy wear and repeated mechanical contact. The bead is suitable for **exterior use only in moderate to sheltered conditions up to two storeys.**

Code	Qty /Pack	Length (mm)	Use
SQPVC10/3.0	15	3000	I / E

All PVC Punched Wing made to order.



Plaster depth – 11mm
 Flange width – 41mm
 Galvanized Steel to BSEN 10327-DX51D+Z275

Supasave Angle Bead (45mm Flange)

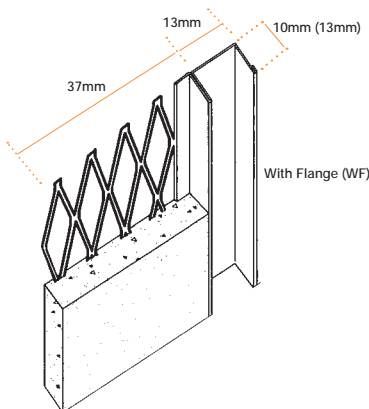
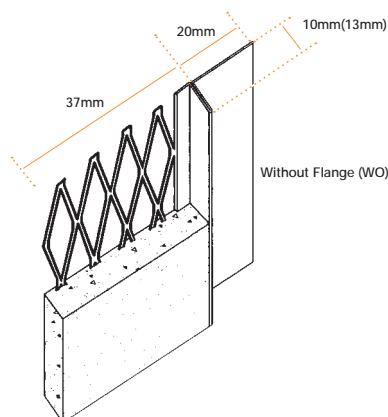
A strong, resilient and cost effective bead designed for two coat applications. Supasave generates a true, straight corner which provides strength and protection from everyday knocks.

Code	Qty /Box	Length (mm)	Use
SS2.40	50	2400	ⓘ
SS3.0	50	3000	ⓘ

Architrave Bead

A bead which may be used to decorative effect where shadow lines are aesthetically desirable. Typical applications include the creation of clean divisions between varying wall finishes, at wall and ceiling abutments, door and window reveals and other built in joinery features.

Code	Qty /Box	Length (mm)	Plaster depth	Use
ARC10/WF/3.0 x25	25	3000	10mm with flange	ⓘ
ARC10/WO/3.0 x25	25	3000	10mm without flange	ⓘ
ARC13/WF/3.0 x25	25	3000	13mm with flange	ⓘ
ARC13/WO/3.0 x25	25	3000	13mm without flange	ⓘ



ARC13/WF/3.0 x25 & ARC13/WO/3.0 dimensions in brackets.

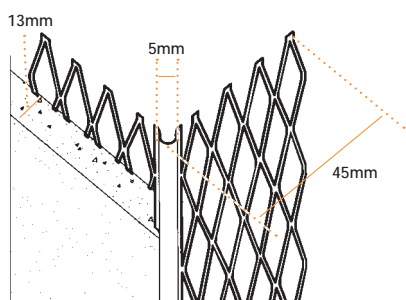
Plaster depth – 10mm & 13mm
Flange width – 37mm
Galvanised Steel to BSEN 10327-DX51D+Z275

Depth Gauge Bead

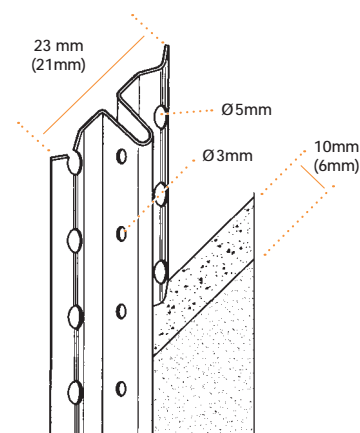
Available in 6mm and 10mm profiles, Depth Gauge Beads provide a quick and accurate means of ensuring consistent, minimum plaster depths as plaster is simply 'ruled off' to leave the required thickness. Depth Gauge Beads may also be used to separate plaster areas and as a skirting bead.

Code	Qty /Box	Length (mm)	Plaster depth	Use
DG6/3.0	50	3000	6mm	ⓘ
DG10/3.0	50	3000	10mm	ⓘ

All Depth Gauge Bead made to order.



Plaster depth – 13mm
Flange width – 45mm
Galvanized steel to BSEN 10327-DX51D+Z275



DG6/3.0 dimensions in brackets.

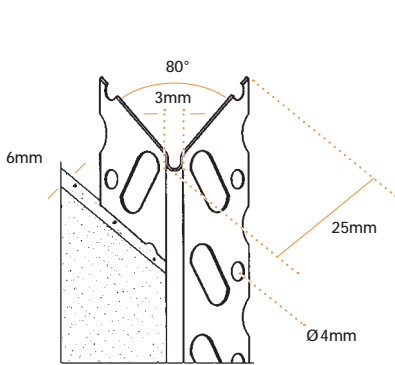
Plaster depth – 6mm, 10mm
Galvanized steel to BSEN 10327-DX51D+Z275

Drywall and Thin Coat Plaster Applications

Dry Wall Angle Bead

Rigid but lightweight, the drywall bead is designed for standard single plasterwork. The internal angle of the Dry Wall bead is accurately manufactured to 80° providing a plaster depth of 6mm.

Code	Qty /Box	Length (mm)	Use
DW2.40	50	2400	ⓘ
DW3.0	50	3000	ⓘ

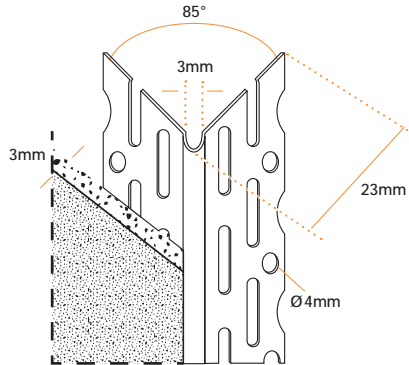


Plaster depth – 6mm
 Flange width – 25mm
 Galvanized steel to
 BSEN 10327-DX51D+Z275

Dry Wall Thin Coat Bead

The Dry Wall Thin Coat bead incorporates a new perforation pattern for improved wing flexibility. This, together with the revised 85° angle, allows greater scope for on-site adjustments and setting.

Code	Qty /Box	Length (mm)	Use
DWTC2.4	50	2400	ⓘ
DWTC3.0	50	3000	ⓘ

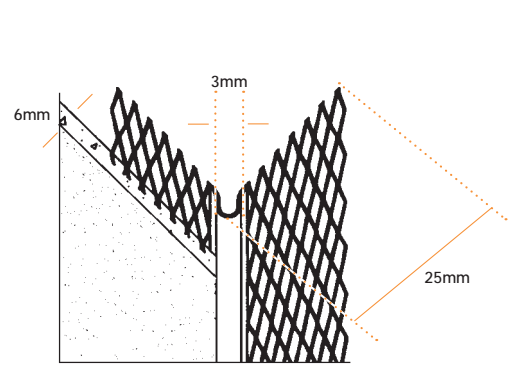


Plaster depth – 3mm
 Flange width – 23mm
 Galvanized steel to
 BSEN 10327-DX51D+Z275

Micro Angle Bead

A popular thin coat bead with fine mesh wings, designed for single coat plaster applications including dry-wall, block and slab work. Provides excellent adhesion and good reinforcement for the arris.

Code	Qty /Box	Length (mm)	Use
MM2.40	50	2400	ⓘ
MM3.0	50	3000	ⓘ

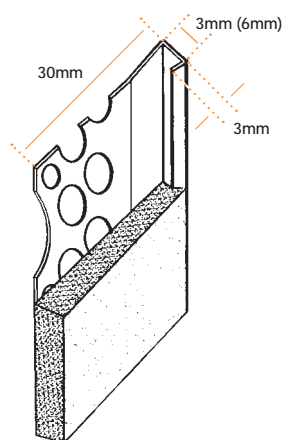


Plaster depth – 6mm
 Flange width – 25mm
 Galvanized steel to
 BSEN 10327-DX51D+Z275

Dry Wall Stop Bead

Designed for thin coat edge protection at openings and for providing abutments of plastered areas to other wall finishes. Light but extremely rigid, the scalloped edge provides for efficient keying and excellent finish.

Code	Qty /Box	Length (mm)	Plaster depth	Use
DWSB3/2.4	50	2400	3mm	ⓘ
DWSB3/3.0	50	3000	3mm	ⓘ
DWSB6/2.4	50	2400	6mm	ⓘ
DWSB6/3.0	50	3000	6mm	ⓘ



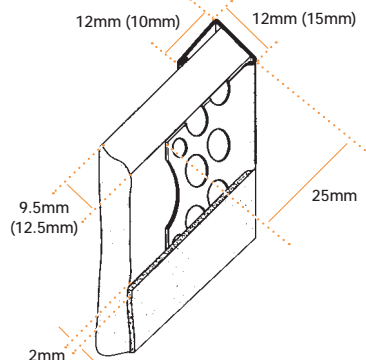
DWSB6 dimensions in brackets.

Plaster depths – 3mm & 6mm
 Flange width – 30mm
 Galvanized Steel to
 BSEN 10327-DX51D+Z275

Plasterboard Edging Bead

Used to reinforce plasterboard edges with the perforated flange fixed flush to the board face prior to the final skim coat. The bead may also be fixed with the flange flush to the inner surface of the board for use in projection wall panelling.

Code	Qty /Box	Length (mm)	Plaster board	Use
PBEB10/3.0	50	3000	9.5mm	ⓘ
PBEB13/3.0	50	3000	12.5mm	ⓘ



PBEB13 dimensions in brackets.

Plasterboard depth – 9.5mm, 12.5mm
 Flange width – 25mm
 Galvanized Steel to
 BSEN 10327-DX51D+Z275

How to Install a Catnic Plasterer's Bead

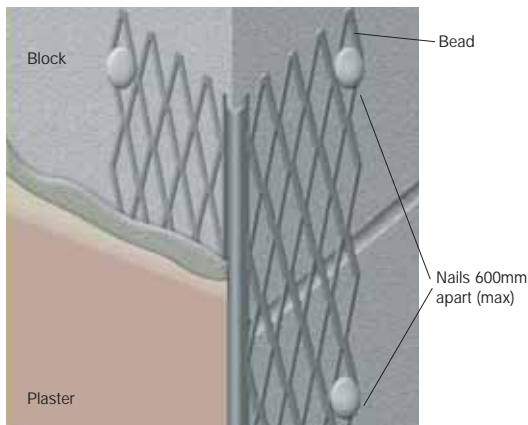
The most appropriate **Catnic** bead should be chosen to suit the application, required plaster depth and the desired finish of the work.

The application and installation of **Catnic** beads should be in accordance with BS 5492:1990 Code of Practice for internal plastering and BS 5262:1991 Code of Practice for external renderings.

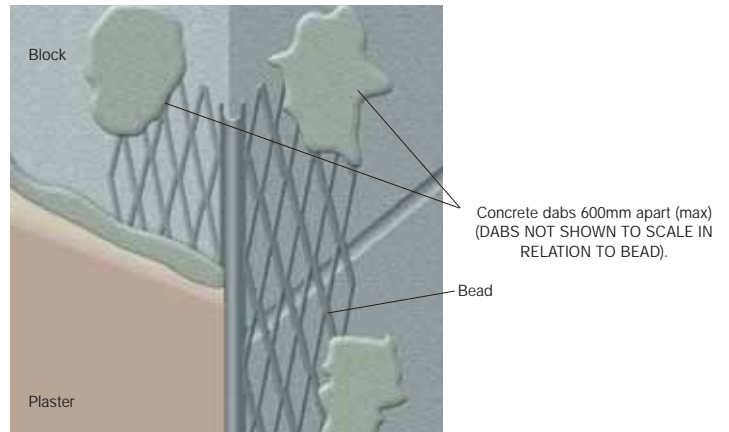
Beads may be trimmed to length using tinman's shears across the wings and a fine toothed saw across bead noses.

Use one of the following methods to fix **Catnic** angle beads and plaster stop beads:

a) Using galvanised or stainless steel nails (compatible with bead material) complying with BS 1202:Part 1, fixed at a maximum of 600mm apart. When nailing to a solid background the line of the bead will follow the line of the background.



b) Pressing the bead onto dabs of the same material as the undercoat. Dabs should be applied at a maximum of 600mm apart. This method will even out minor irregularities in the line of the background, although the line of the bead will tend to generally follow the line of the background.



c) When beads are used with metal lath backgrounds, galvanised or stainless steel tying wire may be used to secure the beads in position. Soft galvanised wire to BS 443 and soft stainless steel wire complying with BS 1554 should be used to match the bead and lath materials. All wires should be twisted tightly and the ends bent away from the finished face of the coating.

Corrosion Protection

In normal circumstances, matured plasterwork may be regarded as dry and therefore non-corrosive. Risks of corrosion in galvanised beads only normally become apparent during the initial plaster drying out period, which should be kept to a minimum, and subsequently during periods of heavy condensation.

The use of sand or water contaminated with soluble salts in plastering mixes should be avoided as should soluble chlorides as they are likely to increase the risk of metal corrosion. The presence of sea salts in sand used in plastering which is in contact with galvanised beads will often cause rust staining and should therefore be avoided.

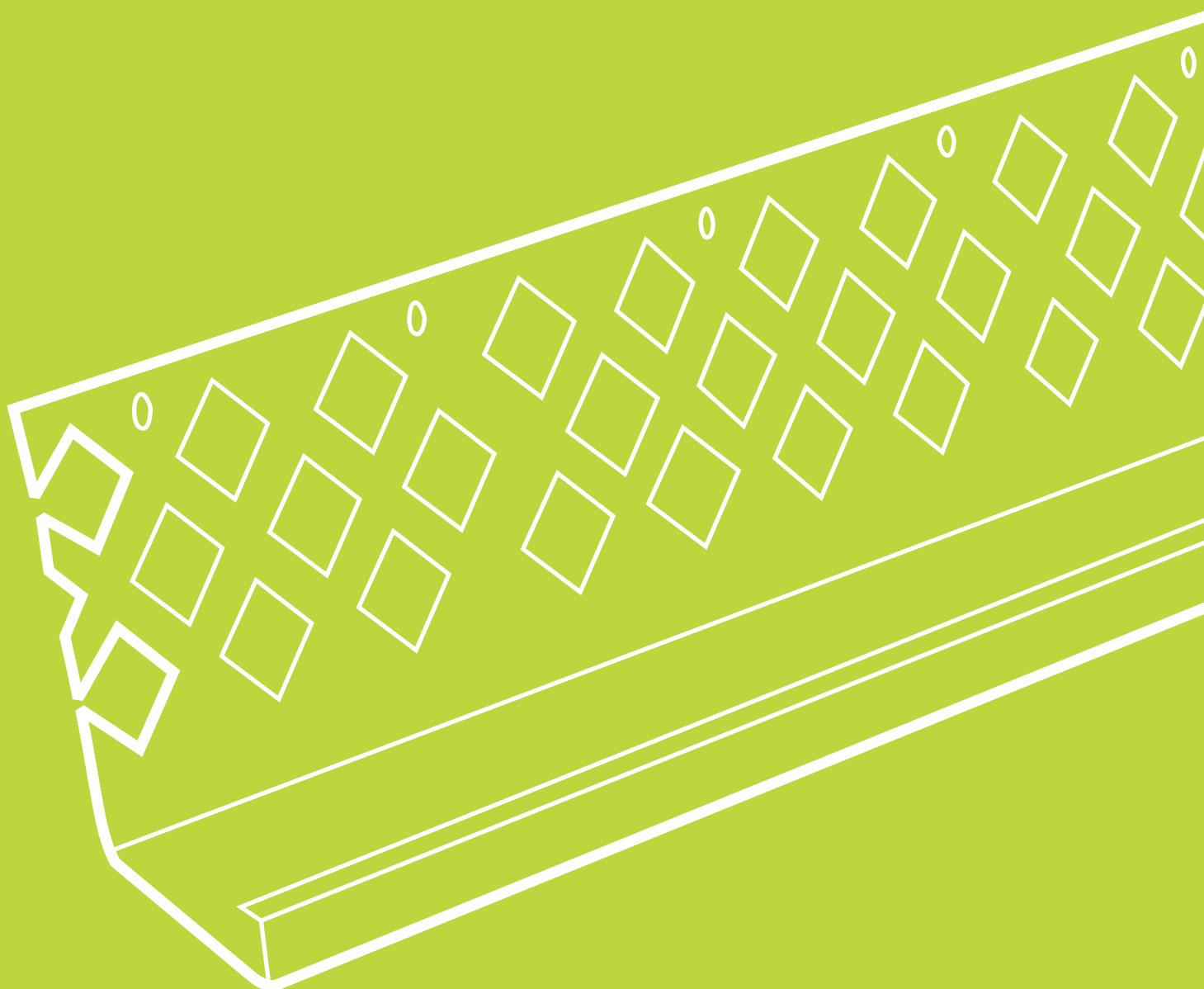
In external applications and, in conditions where heavy condensation, persistent damp or regular exposure to moisture are likely, stainless steel, PVC-U or PVC-U nosed beads should be specified.

In general, care should be taken to ensure that metal beads are kept dry and distortion is prevented during storage and handling. Care should also be taken to prevent mechanical damage to the galvanised coating.

Stainless steel beads are for use specifically with cement based renders. Contact our Technical Services Department if considering the use of stainless steel beads with Gypsum plaster.

PVC-U Plasterer's Beads

A range of non-corrosive, impact resistant white PVC-U plastering beads. Benefits include easy and safe handling and cutting with excellent keying.



PVC-U Plasterers' Beads may be used in areas where high moisture or damp may exist internally and externally as an economical alternative to Stainless Steel. Fixing methods include the use of nails, staples, plaster dabs or jointing filler.

Material

PVC-U white high density polyvinylchloride high impact external window grade.

All PVC-U beads are packed in polysleeves, 25 lengths per pack.

Angle Bead

42mm angle bead is designed to be used with traditional 13mm plaster depths. It has a strong, rigid arris and provides excellent key on all sides and edges.

Plaster Stop Bead

For use in obtaining a clean finished edge to 13mm plaster at openings or abutments to other surface finishes. Provides a keyed surface on both sides of the bead.

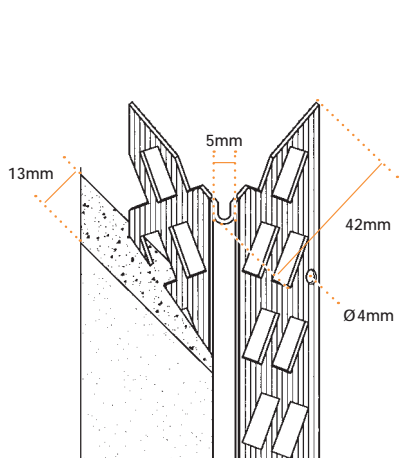
Corner Bead

The 25mm corner bead has a solid spine designed for wallboard corners and thin-coat plaster up to 3mm thick.

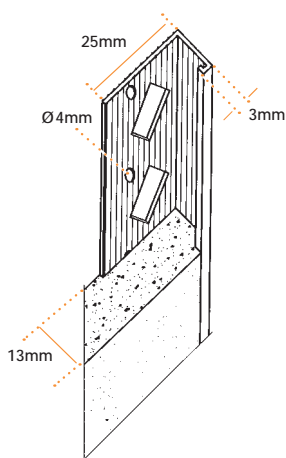
Code	Qty/Box	Length (mm)	Use
NR1535/2.4	25	2400	ⓘ / ⓘ
NR1535/3.0	25	3000	ⓘ / ⓘ

Code	Qty/Box	Length (mm)	Use
NR1536/2.4	25	2400	ⓘ / ⓘ

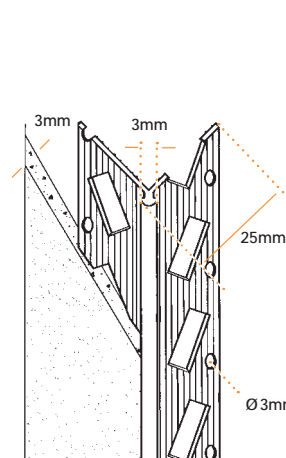
Code	Qty/Box	Length (mm)	Use
NR1456/2.4	25	2400	ⓘ



Plaster depth – 13mm
Flange width – 42mm



Plaster depth – 13mm
Flange width – 25mm



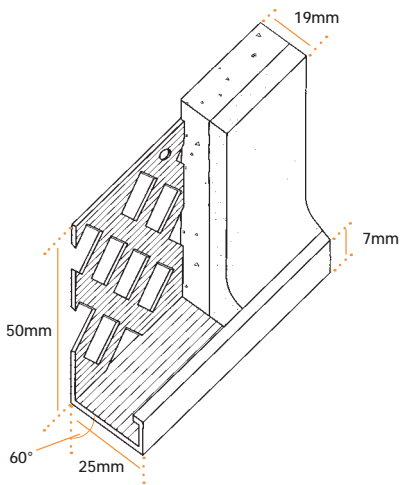
Plaster depth – 3mm
Flange width – 25mm

Please Note: PVC-U Beads are not covered by Catnic's BSEN ISO 9001:2000 certificate.

Bell Cast Render Bead

Used to obtain a neat bell cast lower edge to external render finishes. This profile is designed with excellent corrosion resistant properties and represents a good cost-effective alternative to stainless steel.

Code	Qty/Box	Length (mm)	Use
NR1925/3.0	25	3000	Ⓔ

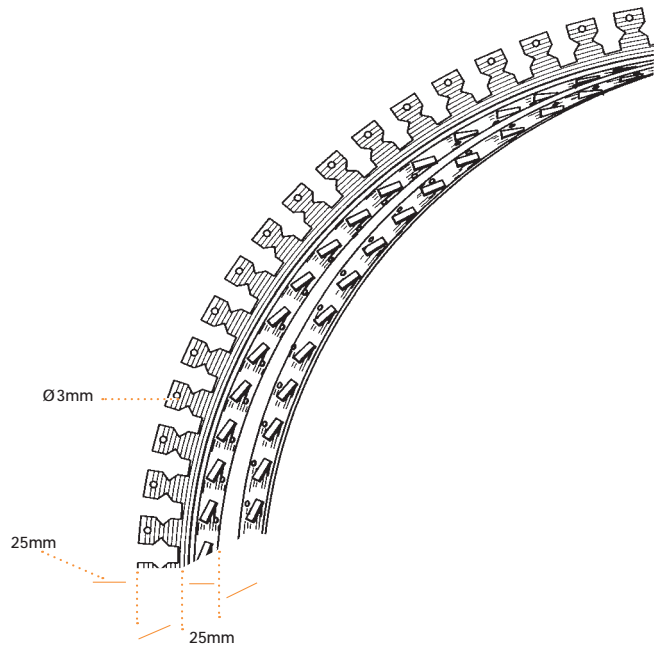


Plaster depth – 16-19mm
Flange width – 50mm

Dry Wall Corner Arch Bead

25mm Corner Arch may be used to form a wide range of curved edges and arch formers to a minimum radius of 250mm for drylining and thin-coat applications. The punched edge allows maximum design and installation flexibility and the ribbed surface provides excellent keying. Fixed by stapling, nailing, jointing filler or adhesive.

Code	Qty/Box	Length (mm)	Use
NR1660/3.0	25	3000	Ⓘ



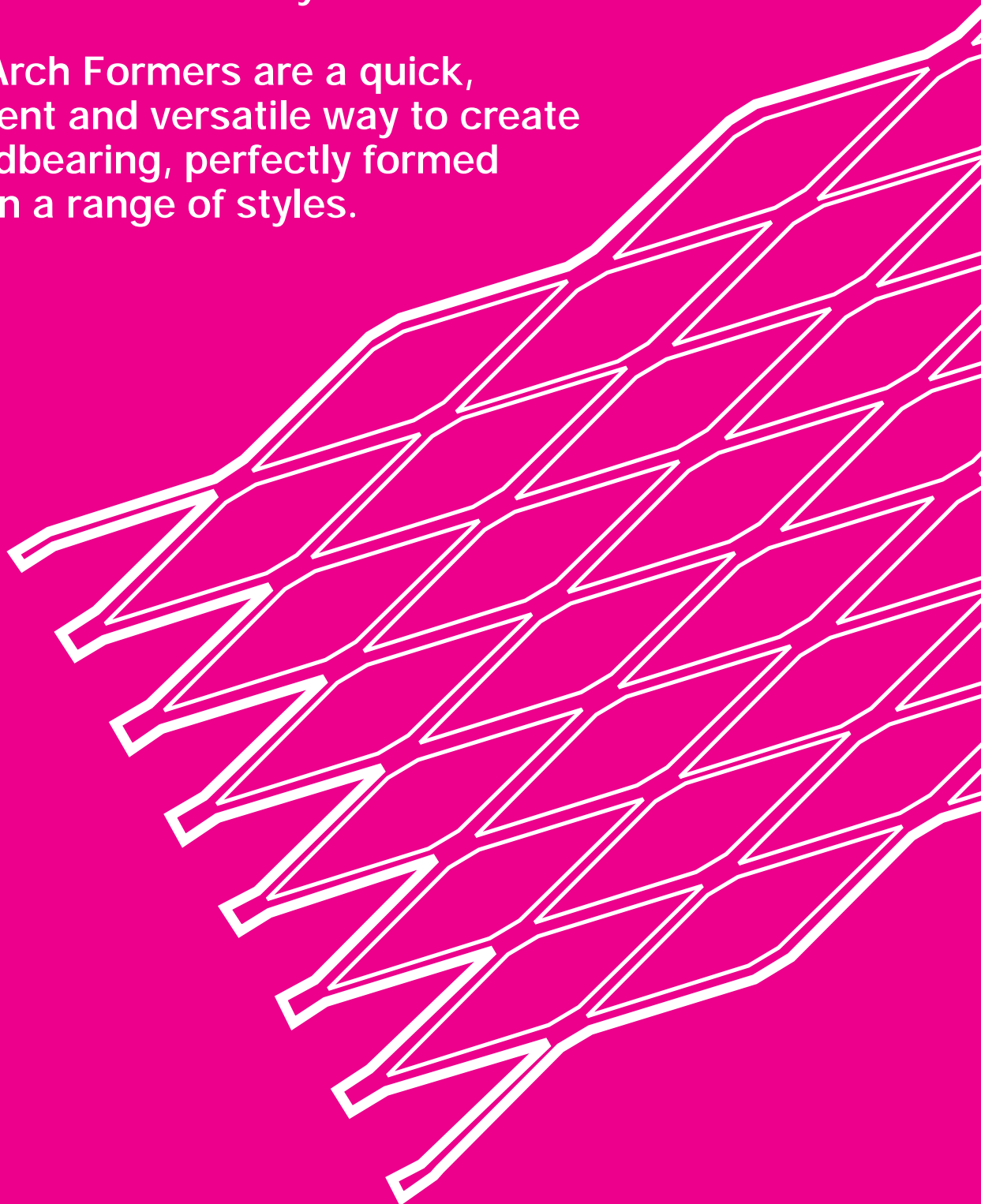
Plaster depth – 3mm
Flange width – 25mm

Metal Lath, Mesh and Arch Formers

Catnic's metal lath is easy to fix and provides a secure key for many plaster and render applications including joint and crack reinforcement and refurbishment work.

Catnic's expanded steel mesh is used primarily as an anti-cracking reinforcement in the construction of brick and block masonry.

Catnic Arch Formers are a quick, convenient and versatile way to create non-loadbearing, perfectly formed arches in a range of styles.



Diamond Lath

An easy-to-fix lath providing a secure key for plaster and render applications as well as offering effective joint and crack reinforcement. In addition, Diamond Lath can be used as part of a fire protection system for structural steel work.

Material

Galvanised steel to BSEN 10327-DX51D+Z275 for internal use.

Stainless steel to BSEN 10088-2-1.4301 for external use and conditions of heavy condensation or persistent damp.

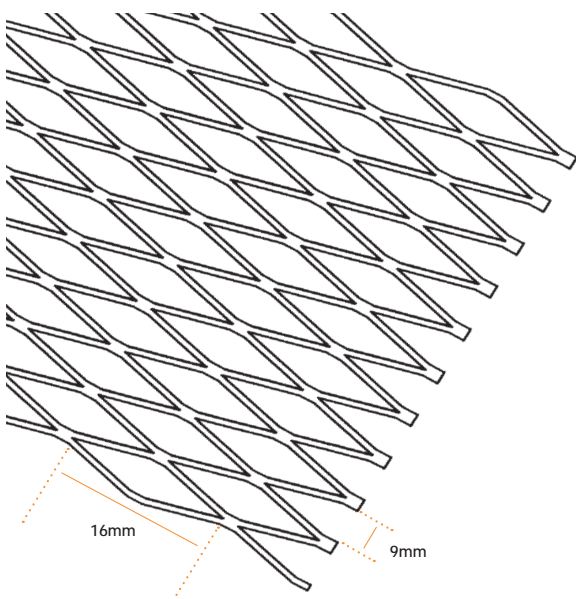
Complies with BS 1369 Part 1: 1987 specification for expanded metal and ribbed lathing.

Installation

Fixing should be in accordance with BS 5492: 1990 Code of Practice for Internal Plastering and BS 5262: 1991 Code of Practice for External Renderings Refer to page 15 for installation guidelines.

Code	Min material weight (kg/m ²)	Material	Qty	Min Sheet weight (kg)	Sheet Size (mm)	Use
DL089*	0.89	Galvanised Steel	10	1.55	2500 x 700	Ⓘ
DL111*	1.11	Galvanised Steel	10	1.94	2500 x 700	Ⓘ
DL161	1.61	Galvanised Steel	10	2.82	2500 x 700	Ⓘ
DL111S*	1.11	Stainless Steel	1	1.94	2500 x 700	Ⓔ

*Not recommended for ceiling applications.



Coil Lath

Code	Width mm	Length m	Use
CL021/100/100	100	100	Ⓘ
CL021/150/100	150	100	Ⓘ
CL021/200/100	200	100	Ⓘ

*All Coil Lath is made to order

Rib Lath

Widely used as a plaster backing on ceilings, walls and stud partitions. Rib Lath is also ideal for refurbishing damaged or aged masonry walls when a key for rendering is not certain due to disintegration or softening of the wall face.

Material

Galvanised steel to BSEN 10327-DX51D+Z275 for internal use.

Stainless steel to BSEN 10088-2-1.4301 for external use and conditions of heavy condensation or persistent damp.

Complies with BS 1369 Part 1: 1987 specification for expanded metal and ribbed lathing.

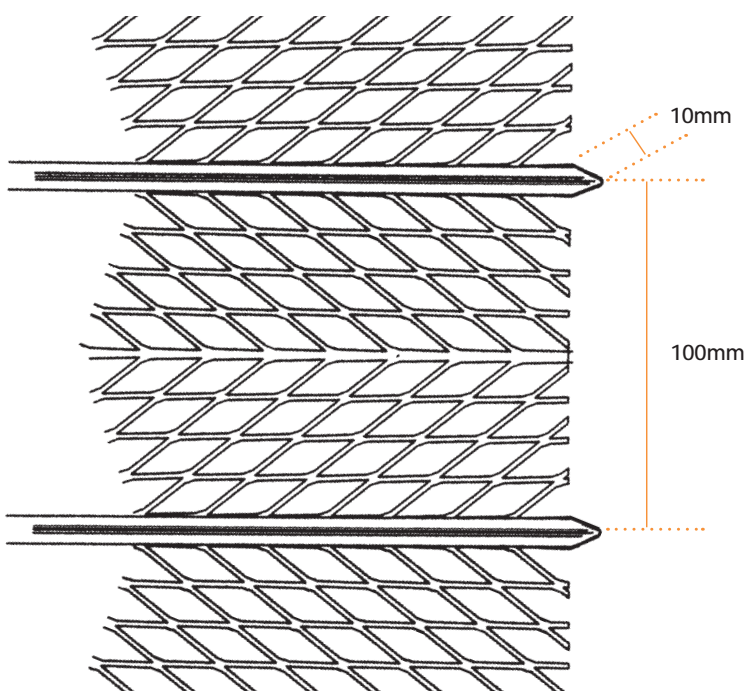
Installation

Fixing should be in accordance with BS 5492: 1990 Code of Practice for Internal Plastering and BS 5262: 1991 Code of Practice for External Renderings.

Refer to page 15 for installation guidelines.

Code	Min material weight (kg/m ²)	Material	Min Sheet weight (kg)	Sheet Size (mm)	Use
RIB148*	1.48	Galvanised Steel	2.59	2500 x 700	ⓘ
RIB184	1.84	Galvanised Steel	3.22	2500 x 700	ⓘ
RIB222	2.22	Galvanised Steel	3.89	2500 x 700	ⓘ
RIB148S*	1.48	Stainless Steel	2.59	2500 x 700	ⓔ
RIB184S	1.84	Stainless Steel	3.22	2500 x 700	ⓔ

*Not recommended for ceiling applications.



Installation of Lath

Diamond Lath

Catnic Diamond Lath may be fixed by (a) nailing into cast-in block background with washers over the lathing, (b) screwing into plugs in drilled holes with washers over the lathing, (c) expanded type screw fixings with washers over the lathing, (d) wiring to prefixed channel sections, angles or cleats, (e) using screwed fixings, or (f) battening out using preserved timber battens with the lath fixed as described below.

Nails (BS 1202: Part 1), staples and wire for fixing lath should be manufactured from galvanized or stainless steel. Nails for fixing to timber battens should be 38mm long with a 7mm head. Alternatively, 32 x 2mm staples may also be used if preferred.

If fitting with nails, screws or proprietary screwed fixings, spacers should be inserted behind the lathing to allow render flow through.

Fixing to Timber supports

For horizontal work, **Catnic** Diamond Lath should be fixed with the length of the sheet running across the timber supports with all the strands sloping in the same direction.

Supports should be at centres not exceeding 350mm. Vertical work should be fixed with all strands sloping downwards and away from the finish face. Using nails or staples, start at the centre of a sheet and nail to each successive support working along the mid-line of the sheet towards its edges. The nails or staples should be driven in at an angle pointing away from the sheet centre thereby providing tension to the sheet as they are applied.

Fixing should then be completed from the centre to the top and bottom sides starting at the central support and nailing at 100mm centres, maximum.

Ends of **Catnic** Diamond lath should be lapped over supports not less than 50mm and wired together at 150mm centres. Sides should be lapped not less than 25mm and tied with tying wire at approximately 150mm centres.

Fixing to Steel Channel

The lath should be fixed to steel channel using 1.22mm soft galvanized steel tying wires at not more than 100mm centres. The tie should be made by forming a hairpin at the end of a length of wire, the length being at least twice the depth of the runner.

The hairpin should be pushed bend first up through the lath, close to one side of the runner and pulled back with one leg of the wire on either side of the runner. Both strands of wire should be pulled taut and given a few twists with top cutters before cutting any surplus wire. The twist may then be pushed flat against the lath.

Required tension in the sheet may be achieved by passing the leg of the hairpin to one side or the other of the lath junctions in accordance with the direction of the desired tension. Continue installation as for timber supports.

Rib lath

Catnic Rib Lath may be fixed to a solid background using proprietary fixings suitable for holding the sheets firmly in place. The edge ribs should be nested with the apex of the rib in contact with the background and fixed to the background at 150mm centres. Sheet ends should overlap by at least 50mm. A row of fixings should be applied at 600mm horizontal spacing, starting 350mm in from the sheet ends and 200mm in from each of the top and bottom sides (for horizontally positioned sheets).

If fixing to supports, rib lath should be fixed with the ribs running at right angles to the supports with the apex of the rib in contact with the support ensuring the spans do not exceed 600mm. The lath should be fixed to timber grounds using a nail or staple driven through every rib where it crosses each support. When fixing to steel channel, use 1.63mm or two strands of 1.22mm soft galvanized steel wire tied around the rib where it crosses each support.

Lap ends of lathing over supports not less than 50mm and wire together with 1.63mm tying wire. Stainless steel tie wire should be used with stainless steel lath. Where laps between supports cannot be avoided, lap ends not less than 100mm and secure each pair of ribs together with two rows of 1.63mm tie wire at approximately 100mm centres.

Sides of adjoining Rib Lath sheets should be pressed together with the edge rib of each sheet nested and tied with 1.22mm tying wire or punch fixed at centres no greater than 150mm.

Coil Mesh

A high quality expanded galvanised or stainless steel mesh for use primarily as anti-cracking reinforcement in the construction of brick and block masonry. Coil Mesh is available in a variety of widths to suit most wall constructions and is supplied coiled for ease of handling. Additional applications include strengthening cornices, low walls and balconies over door and window openings.

Material

Galvanised steel to BSEN 10327-DX51D+Z275.

FOR INTERNAL USE

High quality stainless steel to BSEN 10088-2-1.4301.

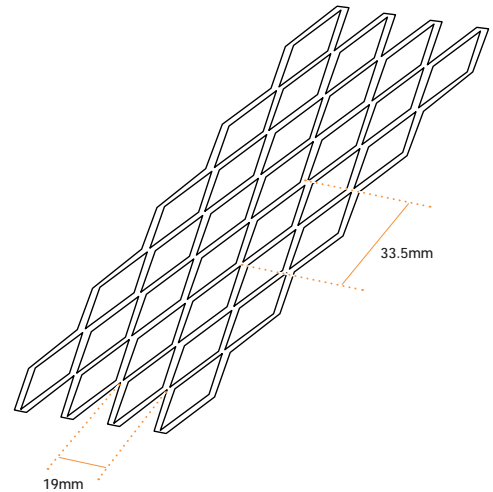
FOR EXTERNAL USE

Galvanised Product Reference	Use	Width (mm)	Length of Coil Product Reference	Stainless Steel	Use
CM64/20	ⓘ	64	20	CM64/20 SS	ⓔ
CM114/20	ⓘ	114	20	CM114/20 SS	ⓔ
CM178/20	ⓘ	178	20	CM178/20 SS	ⓔ
CM229/20	ⓘ	229	20	CM229/20 SS	ⓔ
CM305/20	ⓘ	305	20	CM305/20 SS	ⓔ

Ordering information

Specify from the range of widths offered in the table above to suit the particular brick or blockwork used.

If stainless steel is required add 'SS' to the product reference i.e. CM64/20/SS.



How to Install Catnic Coil Mesh

The coil mesh is laid in strips between brick or block courses leaving approximately 25mm clearance from the faces of the work. Where coil mesh joints are required, ensure they overlap by at least 75mm.

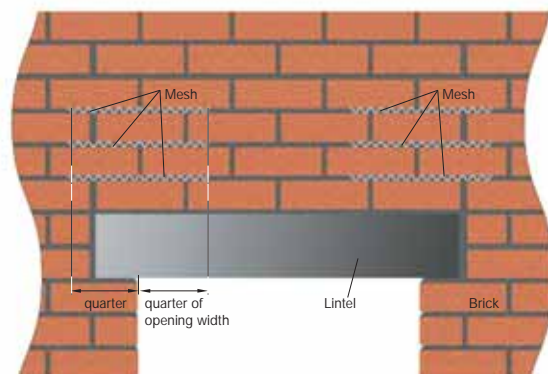
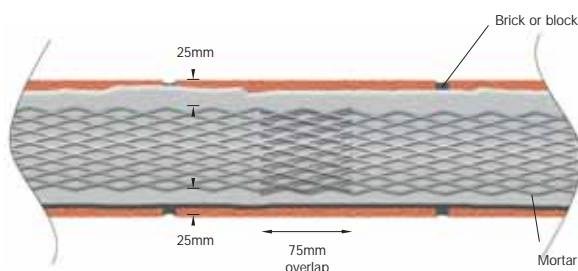
The reinforcement is then simply embedded in the mortar for the next course.

In most instances, application every third course, for the full length of the wall, will be sufficient.

To reinforce brickwork at an opening, e.g. window or door, mesh should be installed to overlap part of the opening, and part of the solid wall.

Thinking of the width of the opening, lay the mesh approximately a quarter of the way across the opening. The mesh should lie the same distance again, across the solid wall.

Above windows or doors, install Catnic mesh for 2-3 courses, starting from the course above the lintel as shown below.



Arch Formers and Accessories

Catnic Arch Formers adjust to fit walls from 90mm up to 230mm thick and on up to 365mm thick when used in conjunction with our extra soffit sections. Each pack contains all the necessary formers to complete both sides of the wall (or arch).

Brick to brick dimension (mm)	Verona		Milano	
	Ref no	Rise (mm)	Ref no.	Rise (mm)
760	VE 0750	372		
810	VE 0800	397		
840	VE 0850	412		
920	VE 0900	452		
1220	VE 1200	602	MI 1200	340
1520	VE 1500	752	MI 1500	380
1830			MI 1800*	410
2440			MI 2400*	440

* Made up of six parts.

Material

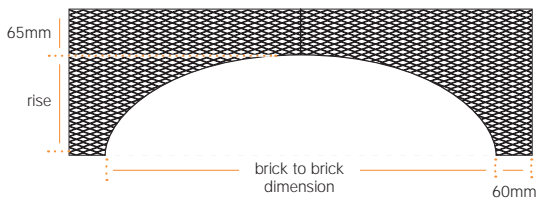
Galvanised steel to BSEN 10327-DX51D+Z275 for internal use.

Installation

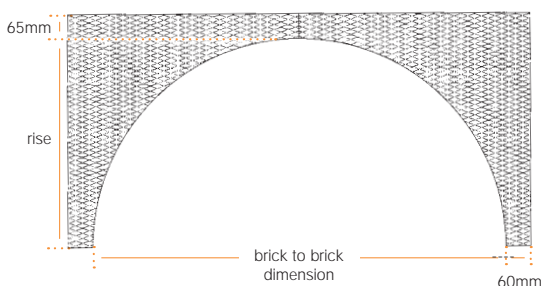
Fixed by masonry nails or plugs and screws (not supplied). The tie wire and complete fixing instructions included with each pack.

NOTE: **Catnic** Arch Formers are non-loadbearing and are not designed to support walls.

Milano

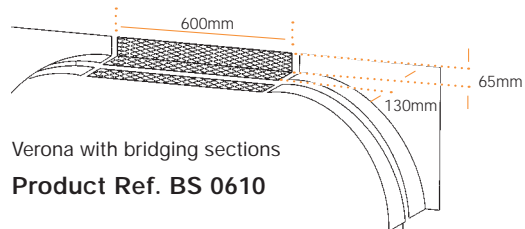


Verona



Accessories

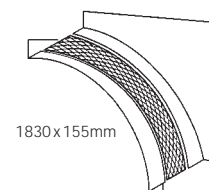
Bridging Section



Verona with bridging sections
Product Ref. BS 0610

Bridging Section BS 0610 (Used to extend arch former span by up to 600mm)

Extra Soffit Section

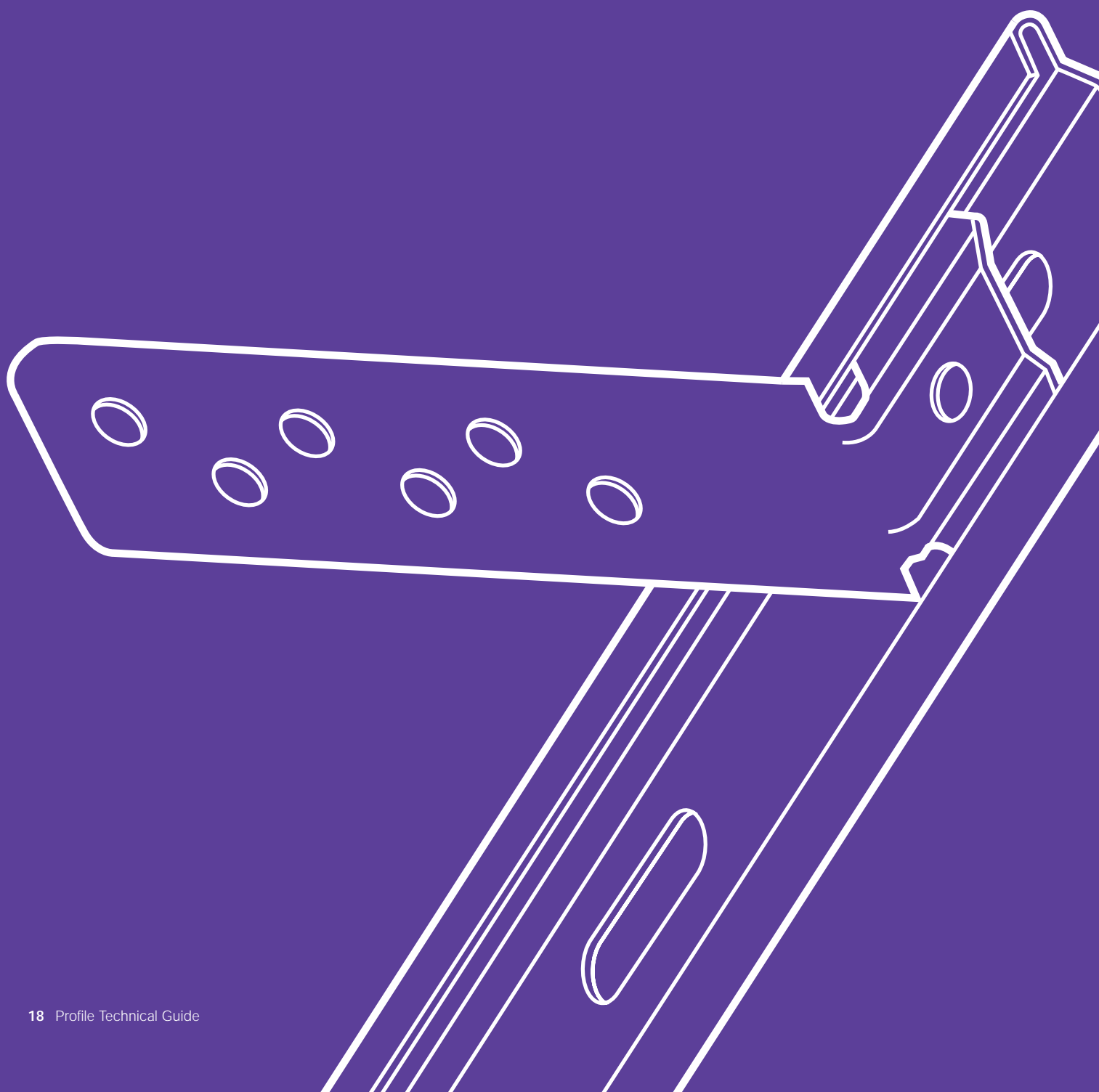


Extra soffit section
Product Ref. ES 0295

Extra Soffit Section ES 0295 (Used to accommodate wall thicknesses of 230-365mm)

Wall Connectors

Catnic's Wall Connectors are a simple yet effective system for tying new masonry walls to existing walls.



Stronghold Wall Connector

Catnic's Wall Connector is a simple yet effective system for tying new masonry walls to existing walls.

Manufactured from stainless steel throughout the Stronghold Wall Connector is both strong and extremely durable. The ties twist into place and are designed to slide into position to suit any type of coursing. One pack will fix a single skin of masonry up to 2.4 metres and is suitable for wall thicknesses between 60mm and 250mm. All the required fixings and detailed fitting instructions are found on the reverse of each pack.

Material

High-quality stainless steel,
BSEN 10088-2-1.4301.

BBA Assessment



Certificate No. 89/2325.

Specification

Stronghold Wall Connector may be used to provide simple lateral support to masonry wall panels in conversion, extension and new building works in the context of BS 5628: Part 1: 1978 (1985).

The system is able to accommodate vertical movement of up to 10mm, due for example to differential foundation movement, without a significant loss of strength.

The design shear strength of the system is 4kN over the height of two connectors (2.4 metres) when used with 3.5N/mm² blockwork in situations up to 3 storeys high (8 metres maximum).

Weathersealing

The vertical joint between the existing wall and the outer leaf of the new wall should be weathersealed either by:

- A pre-compressed sealing strip or polymer-based sealant applied behind the wall connector as shown in Fig. A, or
- The junction perpendicular should be sealed with a pre-compressed sealing strip or polymer-based sealant also shown in Fig. A.

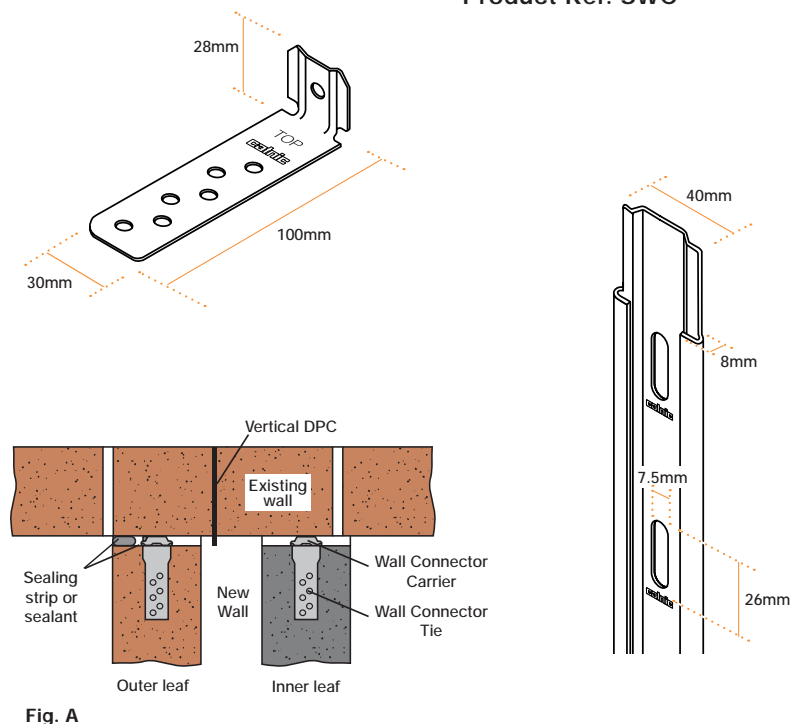
Notes

In line with Building Regulations, reference should be made to your local authority since additional weatherproofing may be required, eg. a vertical damp-proof course cut into the existing wall.

Ordering Information

One pack will fix a single skin of masonry up to 2.4 metres and contains two 1.2 metre stainless steel wall connector carriers, 10 wall connector ties and 5 stainless steel coach screws (M6 x 50mm), washers and wall plugs (10mm diameter) together with comprehensive fitting instructions.

Product Ref. SWC



If you require any further technical assistance, please call our Technical Services Department on 029 2033 7900

How to Install a Stronghold Wall Connector

The existing masonry must be structurally sound, with a flat, vertical surface.

Fixings for the wall connector carriers must be made into bricks or blocks and not into mortar joints.

For cavity wall construction a wall connector carrier must be used with each leaf.

For external walls the bottom edge of the lower wall must be above the damp proof course. The vertical joint between the existing wall and the outer leaf of the new wall must be weathersealed as detailed on page 19. Any rendered or pebble-dashed finish should be removed to ensure that wall connector carriers are fixed directly to the existing masonry.

Installation Procedure

1. Mark a vertical line on the existing wall at the centre of the proposed new wall.
2. If required (see 'Notes' on page 19) make a vertical cut into the existing wall in readiness for a vertical damp proof course.
3. Install the wall connector carriers starting with the lowest carrier at the bottom of the proposed joint and working upwards to the highest carrier.
4. Place the first wall connector carrier over the marked centre-line and the fixing positions marked as shown in figure 1.

This ensures that the carrier is positioned above the damp proof course and that all fixing positions avoid mortar joints. If necessary, use the alternative positions i.e. 450mm and 600mm.

5. Drill and plug holes using a 10mm masonry drill.
6. Lightly attach the first carrier to the masonry with the coach screws and washers provided, at the two lower fixing positions only.

7. Slot the second wall connector carrier into the lower carrier so that both end fixings slots overlap. If necessary, reduce the length of the second carrier to accommodate the height of the new wall by cutting at one end only.

8. Repeat the instructions in sections 4, 5 and 6 for the second carrier.

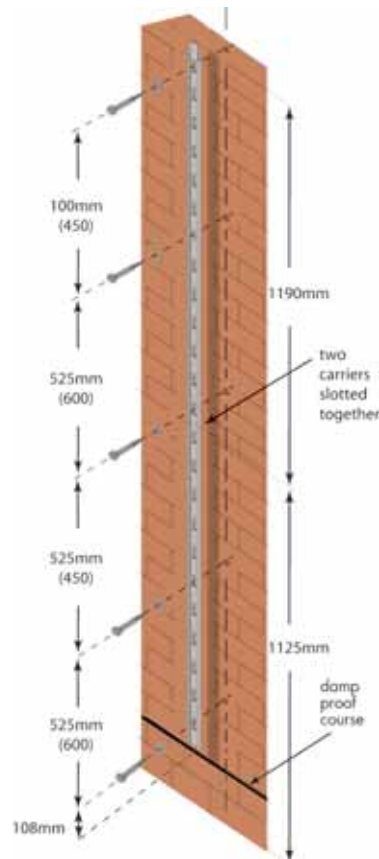
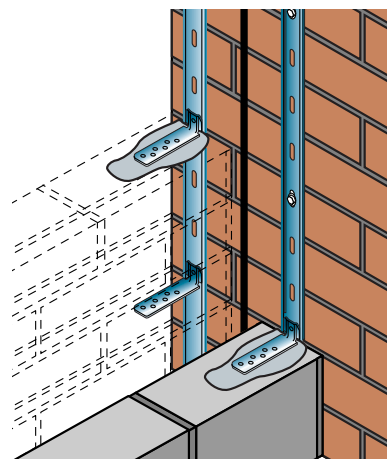


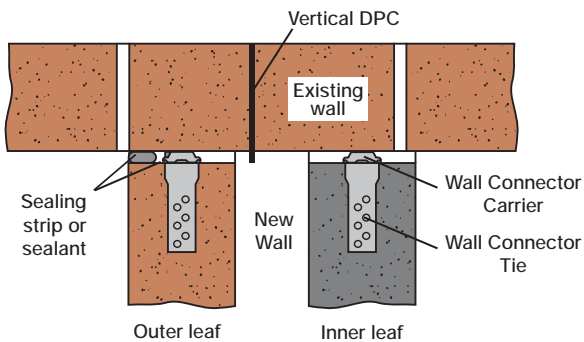
Fig 1



9. For any additional carriers required to complete the joint, repeat the instructions outlined in sections 7 and 8. If an overlap slot should coincide with a mortar joint, fix the two overlapped carriers separately on slots adjacent to the overlap.

10. For external walls, if required, position sealant behind the wall connector carriers (see figure 2 below).

Fig 2



11. Align the wall connector carriers and tighten all coach screws.

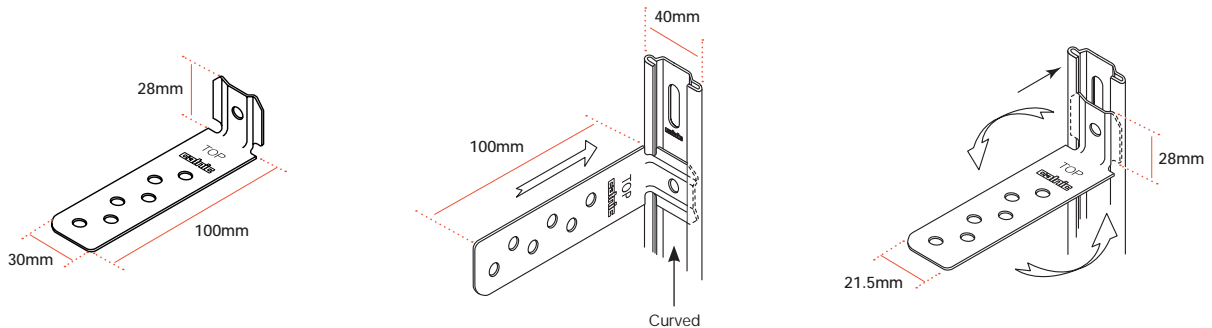
12. Attach wall connector ties to the wall connector carriers by twisting and sliding into position at a maximum of 300mm centres (see figure 3 below).

13. Lay brickwork or blockwork for the new wall in the conventional way, with a full mortar joint between the existing and the new walls. Bed the wall connector ties onto mortar and apply a mortar bed over the top so that the ties are completely surrounded with mortar.

14. For external walls, at the completion stage of the new wall, insert the impregnated foam sealing strip or polymer-based sealant at the junction perpend (see figure 2).

15. If required, insert the extended vertical damp proof course into the aperture cut as described on page 19.

Fig 3



Cavity Wall Ties

All Catnic wall ties are manufactured from high quality stainless steel wire and strip materials to ensure that structural design properties are maintained throughout the life of the structure.



Stainless Steel Wire Ties

Designed for traditional cavity wall constructions, our ties combine ease of use with the safety and security standards expected from all **Catnic** products.

Material

Manufactured from 2.5mm (BW4) and 3.3mm (BW2) austenitic stainless steel wire to BS 1554: 1990 minimum 18/8 composition for proven corrosion resistance.

Quality control on the ties includes checks on the incoming steel for chemical composition, dimensional tolerances and mechanical properties. During manufacture, regular visual and dimensional checks are made.

**Product Ref: BW4/200 BW4/225
BW2/200 BW2/225**

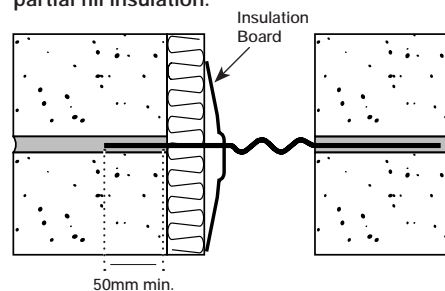
Application

The ties can be easily built into brickwork or blockwork during construction. The ties are smooth, without sharp edges and are designed to resist the collection of mortar droppings.

BW4 and BW2 ties should be installed at a density of 2.47 ties per square metre (450mm vertical and 900mm horizontal spacing) in domestic houses and small commercial buildings.

Ties may be positioned centrally or offset in the cavity provided that they are embedded a minimum of 50mm in both leaves.

Tie position offset in cavity when using partial fill insulation.



Retaining clip shown in correct position – i.e. flat surface facing insulation

The maximum cavity width should not exceed the design cavity +25mm.

BBA Assessment



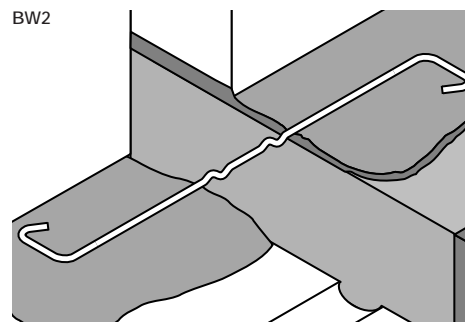
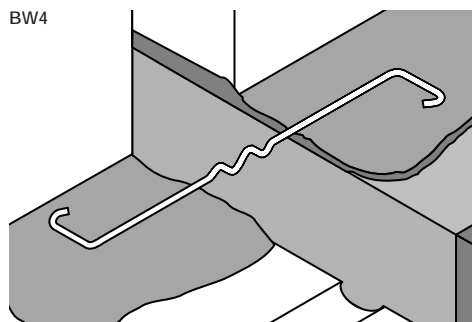
Certificate No. 91/2690.

Stainless Steel Wire Ties

Cavity (mm)	Design	Tie Size (mm)	Specify	DD140: Part 2 Classification	Design Wind Speed
50-75	2 storeys up to 10m	2.5 x 200	BW4/200	Type 4	Ref. Table 1 page 27
76-100	2 storeys up to 10m	2.5 x 225	BW4/225	Type 4	Ref. Table 1 page 27
50-75	3 storeys up to 15m	3.3 x 200	BW2/200	Type 2	Anywhere in UK up to 56m/s
76-100	3 storeys up to 15m	3.3 x 225	BW2/225	Type 2	Anywhere in UK up to 56m/s

BW4/200 and BW4/225 are DD140 Type 4 cavity wall ties and may be specified where butterfly ties would have been used as detailed in Table 6 of BS 5628. All wall Ties are made to order.

BW2/200 and BW2/225 are DD140 Type 2 cavity wall ties and may be specified where butterfly ties would have been used as detailed in Table 6 of BS 5628.



Assessments/characteristic strengths – Wire and Strip Ties

BW4/200		DD140: Part 2 1987 type 4 requirement	Catnic BW4/200
Tensile	At serviceability	150	505
Load (N)	At failure	650	1333
Compressive	At serviceability	120	625
Load (N)	At failure	450	677

BW4/225		DD140 Part 2 1987 type 4 requirement	Catnic BW4/225
Tensile	At serviceability	150	464
Load (N)	At failure	650	1326
Compressive	At serviceability	120	462
Load (N)	At failure	450	499

BW2/200		DD140 Part 2 1987 type 2 requirement	Catnic BW2/200
Tensile	At serviceability	500	603
Load (N)	At failure	1800	1935
Compressive	At serviceability	400	1184
Load (N)	At failure	1300	1605

BW2/225		DD140 Part 2 1987 type 2 requirement	Catnic BW2/225
Tensile	At serviceability	500	675
Load (N)	At failure	1800	1834
Compressive	At serviceability	400	942
Load (N)	At failure	1300	1569

BB-2		DD140 Part 2 1987 type 2 requirement	Catnic BB-2
Tensile	At serviceability	500	1321
Load (N)	At failure	1800	3183
Compressive	At serviceability	400	552
Load (N)	At failure	1300	1300

BB-3		DD140 Part 2 1987 type 2 requirement	Catnic BB-3
Tensile	At serviceability	500	1529
Load (N)	At failure	1800	4051
Compressive	At serviceability	400	1540
Load (N)	At failure	1300	2374

Stainless Steel Strip Ties

Material

Manufactured from 0.6mm and 0.8mm austenitic stainless steel to BSEN10088-2-1.4301 (18/8) for proven corrosion resistance.

BBA Assessment



Certificate No. 91/2690.
(BB-2 & BT2-4)

Application

BB-2 stainless steel strip ties are designed for fixing masonry to masonry in cavity walls of domestic houses and small commercial buildings up to three storeys in height not exceeding 15 metres. The ties are suitable for cavity widths of 50mm when installed at a density of 2.47 ties per square metre (450mm vertical, 900mm horizontal spacing).

BB-3 stainless steel strip ties are designed for fixing masonry to masonry in cavity walls of domestic houses and small commercial buildings up to five storeys but not exceeding 15 metres in height. The ties are suitable for cavity widths of 75mm when installed at a density of 2.47 ties per square metre. The BB-3 has been BRE assessed for the above application.

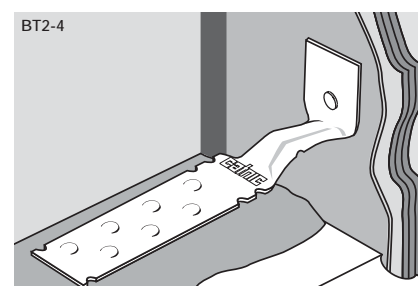
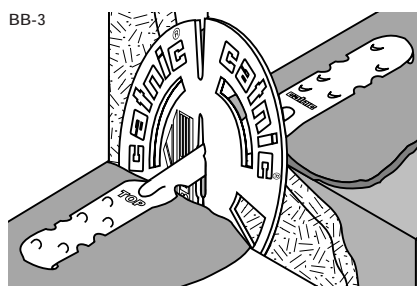
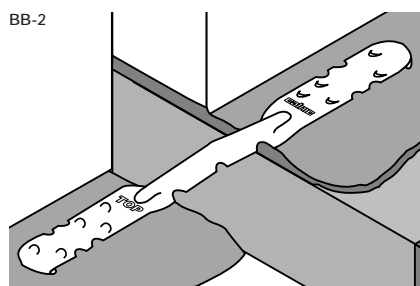
BT2-4 stainless steel strip ties are designed for fixing masonry to timber framing in dwellings of up to 4 storeys, up to a maximum height of 12 metres. Suitable for cavity widths of 50mm. The ties are sufficiently flexible so as not to cause cavity growth as a result of the reduction of moisture content in the timber and settlement of the frame structure. For tie densities and height restrictions, refer to the following BBA certificates: 4 storey dwellings, Cert No. 91/2690 detail sheet 6; 2 storey dwellings, Cert No. 91/2690 detail sheet 3.

BT2-4 ties are supplied with stainless steel annular ring 50 x 3.35mm nails.

Product Ref. BB-2 BB-3 BT2-4

Stainless Steel Strip Ties

Cavity (mm)	Design	Tie Size (mm)	Specify	DD140: Part 2 Classification	Design Wind Speed
50	3 storeys up to 15m	0.6 x 19 x 191	BB-2	Type 2	Anywhere in UK up to 56m/s
75	5 storeys up to 15m	0.8 x 19 x 220	BB-3	Type 2	Anywhere in UK up to 56m/s
50	Timber frame 4 storeys up to 12m	0.6 x 19 x 120	BT2-4		Anywhere in UK up to 50m/s



Insulation Retainers

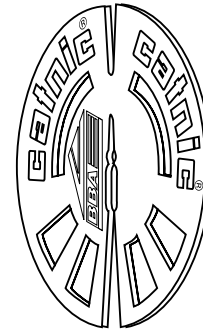
Universal IRC 85

Universal IRC 85 Insulation Retainers are designed for retaining rigid board or mineral wool/fibre insulation material. Intended for use with **Catnic** wire and strip ties, the IRC 85 may also be used in conjunction with BS 1243 double triangle ties. Used in a cavity with a minimum of 25mm insulation.

retainers should be clipped onto the ties and the flat face of the disc pushed against the surface of the insulation.

Material

Injection moulded polypropylene, orange in colour, 85mm in diameter. Each clip bears the **Catnic** logo and the BBA Certificate number.



Universal IRC 85

BBA
Assessment

Certificate
No. 91/2690

References from DD140: Part 2: 1987

Classification by end use.

Type 2 Masonry: General purpose

Type of structure & frequency of use

Suitable for masonry cavity walls of domestic houses and small commercial buildings up to three storeys, i.e. not greater than 15m in height, comprising two leaves of brick or blockwork of similar thickness in the range 90mm to 150mm. May be suitable for cavity walls having leaves of disparate thickness or stiffness or for cladding walls in high rise buildings, but should only be used in these situations if shown to be of adequate performance by calculation. Density not less than 2.5 ties per square metre.

Geographical location

Suitable for buildings anywhere in the British Isles, i.e. where the basic wind speed may be up to 56m/s.

Type 4 Masonry: Light Duty

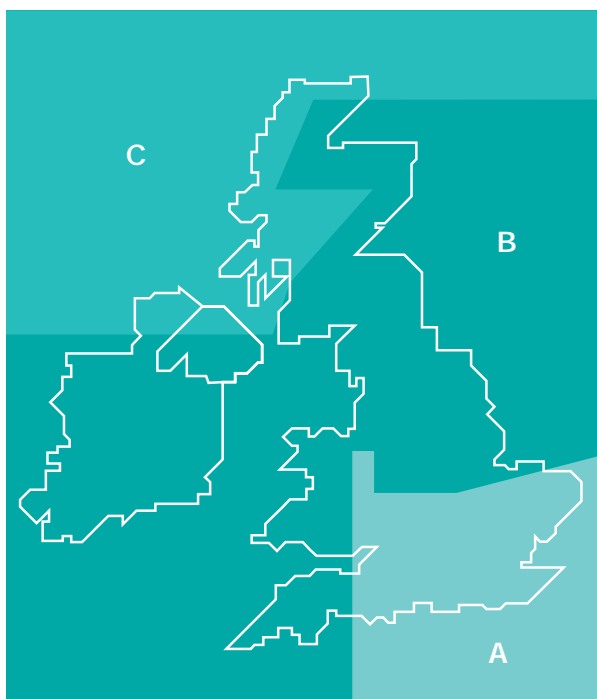
Type of structure & frequency of use

Suitable only for masonry cavity walls, comprising two leaves of similar thickness in the range 90mm to 150mm, in box form domestic dwellings of up to two storeys and no greater than 10m in height. Not suitable for cavity walls having leaves of disparate thickness or stiffness, for cladding walls of any type or for multi-storey structures of more than two storeys. Density not less than 2.5 ties per square metre.

Geographical location

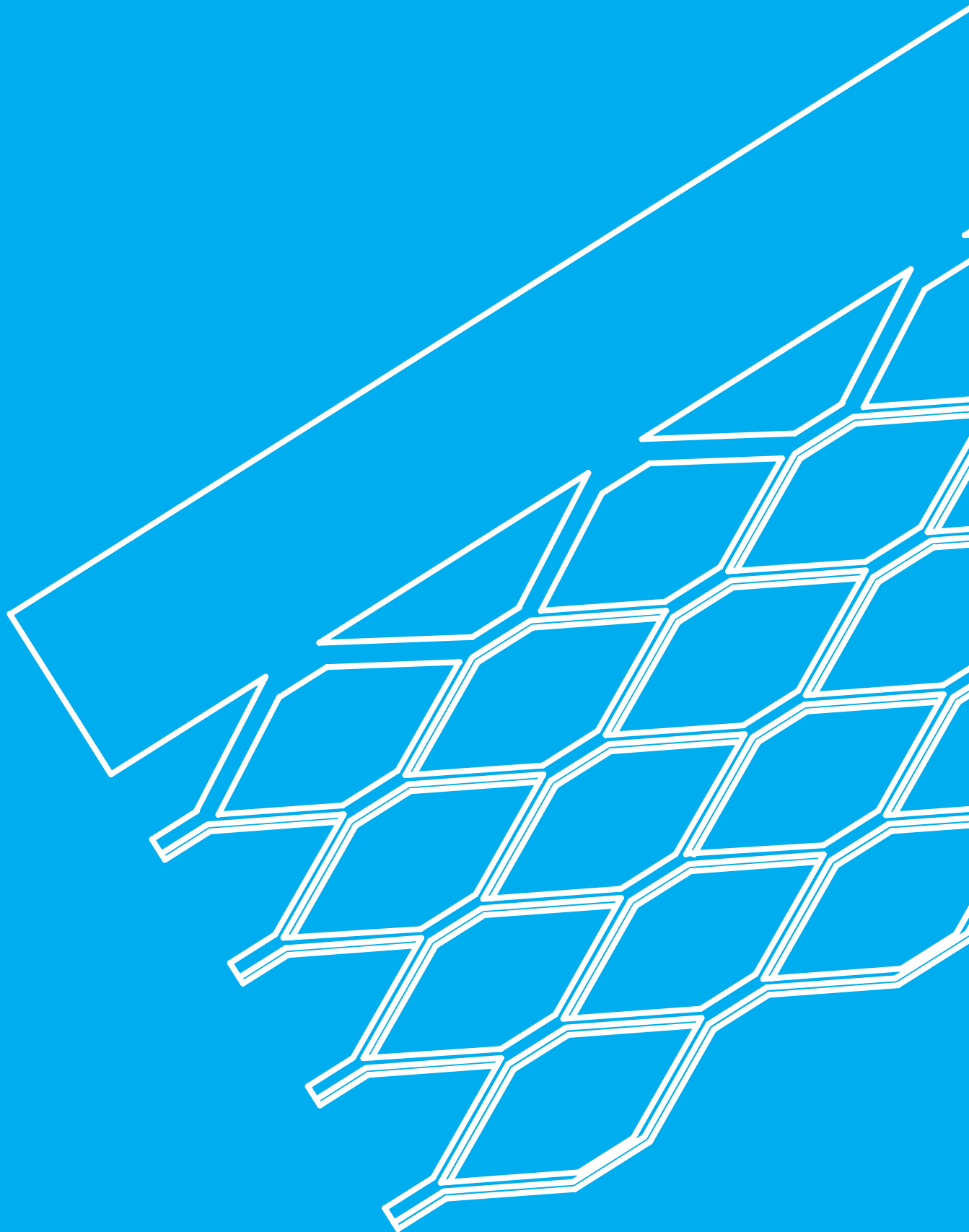
Suitable for buildings anywhere in England where the basic wind speed does not exceed 44m/s or for buildings on town or city sites in areas where the basic speed does not exceed 52m/s.

Wind Zones



- A = Basic wind speed $\leq 44\text{m/s}$
- B = Basic wind speed $> 44\text{m/s} \leq 52\text{m/s}$
- C = Basic wind speed $> 52\text{m/s}$

Technical Information



Recommended Specification Clauses

Where highlighted, specify the appropriate (1) profile, (2) product reference, (3) material and (4) fixing method to meet your specification requirements. The products and references used here are examples only.

Health & Safety: Installation to be carried out in accordance with HSE guidelines and reference should be made to the **Catnic** guide to safe storage, handling and application on site.

Internal Plaster and External Render work

Substrate: Masonry and board backgrounds are to be free of deleterious substances such as mould, oil or grease and be adequately prepared to accommodate the finished surface, all beading and attendant fixings at the specified depths.

At external corners fix **Catnic**... *Supasave (1)*... angle bead, reference... *SS2.40 (2)*... manufactured in... *galvanized steel/stainless steel/PVC-U (3)*... install in accordance with **Catnic** published recommendations with wings... *embedded in dabs of the same material used for the undercoat/fixed using corrosion resistant galvanized/stainless steel nails (4)*... at nominal 600mm spacing, wire tied where jointed to lathing and with bead lengths jointed by alignment dowels.

At abutments to openings, windows, framing and other internal corners, fix **Catnic**... *13mm Plaster stop bead (1)*..., reference... *PS13/2.4 (2)*... manufactured in... *galvanized steel/stainless steel/ PVC-U (3)*... maintaining the required plaster depth. Fit plasterboard edging beads reference... *PBEB13/3.0 (2)*... with the long flange to the... *front/ rear*... face. Install in accordance with **Catnic** published recommendations with wings... *embedded in dabs of the same material used for the undercoat/ fixed using corrosion resistant galvanized/ stainless steel nails (4)*... at nominal 600mm spacing and wire tied where jointed to lathing.

Form specified movement joints/control joints through the whole of the plaster/render depth and fix **Catnic**... *13mm Movement bead (1)*..., reference... *MB13/3.0 x10 (2)*... manufactured in... *galvanized steel/ stainless steel/ PVC-U (3)*... install in accordance with **Catnic** published recommendations with wings... *embedded in dabs of the same material used for the undercoat/ fixed using corrosion resistant galvanized/ stainless steel nails (4)*... at nominal 600mm spacing and wire tied where jointed to lathing.

Metal Lath

Substrate: Masonry / timber / steel... backgrounds and support work are to be free of deleterious substances such as mould, oil or grease with all supports securely anchored into the background and positioned as recommended within the **Catnic** technical literature.

Apply **Catnic** ...*Diamond lath / Rib lath (1)*... reference ...*DL111 / RIB148 (2)*... manufactured in ...*galvanized steel / stainless steel (3)*... using fixings and fixing methods in accordance with the manufacturers published recommendations ensuring the lengths of the sheets run across the supports and the slope of the strands is in the same direction.

Substrate: Masonry/Timber work is to be predominantly free of deleterious substances such as mould, oil or grease and be soundly prepared and aligned to accommodate the building components.

Coil Mesh

Apply anti-cracking reinforcement, **Catnic** *coil mesh*, reference... *CM178/20 (2)*... manufactured in... *galvanized steel/stainless steel (3)*... install in accordance with the manufacturers recommendations, embedded in mortar joints... *every third course/over openings/within cornices (4)*

Wall Connectors

Install **Catnic**... *Stronghold wall connectors*, reference... *SWC*... positioned at junctions of existing and new masonry as detailed in drawings. Install in accordance with the manufacturers instructions with ties fully embedded in mortar joints.

If you require any further technical assistance, please call our Technical Services Department on **029 2033 7900**

Control of Substances Hazardous to Health Regulations 1999

Substances for use at work provision of information: **Catnic** Products

- 1 All COSHH related queries should be directed to the Health and Safety Officer on 029 2033 7900.
- 2 **Product Name**
 - a) **Metal Products:** wall connectors and QwikPost (fence post supports).
 - b) **Mesh Products:** coil mesh, expanded metal lath, plasterer's bead and arch frames.
- 3 **Uses**

All products should be used in accordance with the Company's recommendations and comply with the details shown on the Architects'/Engineers' drawings.
- 4 **Material Specification**

All products are produced from the following:

 - i) Hot dipped galvanised steel to BSEN 10327 1991 with or without applied polyester powder coating: or
 - ii) Stainless steel to BSEN 10088-2: 1995 and BS 1554: or
 - iii) Semi-rigid PVC: or
 - iv) Zinc phosphate mild steel to BS 1449:HR4 with applied polyester powder coating.
- 5 **Health Risks**

The products are considered as non-hazardous to health under normal conditions of use.
- 6 **Handling Precautions**

Gloves should be worn to avoid injury from any sharp edges. In event of a cut, the injury is to be treated by a trained first-aider. When lifting or carrying, consideration must be given to size and weight of the product. Caution should be exercised when mechanical handling, ensuring the load is evenly balanced and the straps or slings secure.
- 7 **Additional Risk Factors**

Processes such as welding, burning, cutting or grinding can result in vaporising the metal or generating airborne particles that may present additional hazards. Appropriate PPE must always be worn. The products are not subjected to an Occupational Exposure Standard.
- 8 **Storage**

Unless required for immediate use on site, all products should be stored in a clean and dry environment. Products should be stored on pallets or suitable racking where practicable. Do not leave items projecting that could cause injury and avoid storage in high traffic areas where risk of damage is increased.
- 9 **Application**

All products should be used in accordance with the manufacturers recommendations outlined in this brochure, and should comply with the details shown on the Architects'/Engineers' drawings.

Do not use damaged goods. Packaging to be removed with care and disposed of in a safe manner. When disposing of any **Catnic** products or packaging, due consideration must be given to the environmental impact of the method of disposal.
- 10 **Emergency Actions**
 - a) Spillage Not applicable
 - b) Fire No special precautions but avoid inhalation of smoke and fume.
 - c) First Aid Normal first-aid requirements, Treat all cuts and abrasions.
 - d) Injuries Minimise risk of injuries by strict adherence to all instructions.

The information given in this publication was correct to the best of our knowledge at the date of publication. However, Catnic reserves the right to revise product specifications described herein without prior notice. Users and specifiers must satisfy themselves as to the suitability of any particular product or detail for a specific application.

If you require any further technical assistance, please call our Technical Services Department on **029 2033 7900**

Catnic, Lintels and much, much more...

Catnic has pioneered the steel lintel for more than three generations by building a reputation for superior quality, reliability and customer satisfaction, backed by our excellent service.

Our range of products come with comprehensive technical and specification details assuring peace of mind, complete satisfaction and confidence in the finished job.

Catnic is committed to providing the construction industry with new and improved products by enhancing our range with innovative solutions for your building needs.

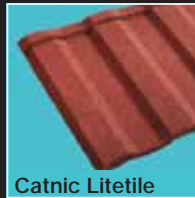
Lintels: Catnic, a world leader in Lintels has over 30 years of experience in the manufacture and technical development of steel lintels, guaranteeing confidence in our products and first class service.



Catnic Lintels

- Duplex double protection against corrosion; galvanised steel PLUS a black polyester coating (for Standard lintels)
- Integral insulation
- Built-in damp proof course
- Built-in plaster key
- Free design service for bespoke feature lintels
- Free scheduling service

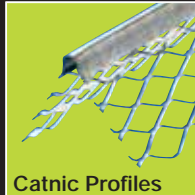
Litetile: Catnic's innovative approach to building products has resulted in a real alternative to traditional roof tiles. The Litetile range is designed to provide an attractive, modern tiled finish for all types of pitched roofs. The system consists of lightweight tiles and matching accessories in a range of popular colours.



Catnic Litetile

- Versatile with 4 profiles and range of colours
- Easy to fit, from a minimum pitch of 10°
- Maintenance free, saving time and money
- Long lengths mean less tiles, each tile is 1.67m long
- Lightweight, only 6.6kg per square metre
- Robust and durable for a trouble free long life

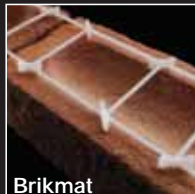
Profiles: Catnic develop, manufacture and supply a comprehensive range of precision made, high quality steel building products. From Plasterers' Beads to Wall Ties all our products benefit from our long experience of using steel in construction.



Catnic Profiles

- Steel Plasterer's beads, precision engineering and simple to use
- PVC-U Plasterer's beads, non-corrosive and impact resistant
- Metal Lath, easy to fix and designed to provide a secure key
- Arch formers, quick, convenient, versatile and perfectly formed
- Wall Connectors, simple and effective masonry ties
- Cavity Wall Ties, high quality stainless steel for a long life

Brikmat: The patented brick spacer system presents a totally new concept in brick laying tools. Catnic Brikmat provides uniform mortar joints on a wide range of building materials including bricks, blocks, decorative stone and cast concrete products.



Brikmat

- Lightweight, fast and easy to use
- Helps eliminate poor brickwork by improving accuracy and quality
- Generates huge savings through improved productivity
- Increasing the volume of bricks or blocks laid in one day
- Maintain guage height between brickwork and blockwork
- Minimise brick and block edge/corner dipping

Qwikpost: A comprehensive range of fence support systems and accessories all manufactured from high quality, long lasting materials. Qwikpost is the quick and easy way to erect or repair a fence.



Catnic Qwikpost

- Easy to install, no digging, no fence post hammering
- Flexible with built-in systems for undersized fence posts
- Wide range of supports and accessories to suit every application
- Suitable for both soft and hard ground applications
- Repair spikes, ideal for that Qwik-fix
- Drains water away from the fence post for increased fence life

For more information about any of these products, please call Catnic on 029 2033 7900, for a brochure.

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