

CERRAMETALWORKS

METALWORKS

Cerra Metal Works Pty Ltd. has manufactured control gap ties and connectors since 1981. Cerra provides complete technical information and design assistance to Architects, Engineers, Owners and Contractors relating to connecting of brick/ block wall constructions.

All products manufactured by Cerra have been tested and satisfy or exceed the requirements of AS/NZS 2699.2:2000 and 3700. Performance and recommended use of the full line of Cerra control gap ties is well documented and presented in this new technical literature.

Cerra's line of Engineered "Control Gap Ties" features many innovative products that absorb differential movement, strong, easy to install. Designed to be applied in many situations hence reducing stock holding and costs.

Design of brick or block walls for differential movement is covered by many excellent publications produced by the Brick and Mortar Research Laboratory and Australian Standards (AS3700).

When specifying or ordering Cerra products, please state the CGT code (e.g. CGT 1) or for Stainless Steel Grade (e.g. CGT 1(ss-316)).

Cerra Control Gap Ties "state of the art solutions" for masonry connectors.

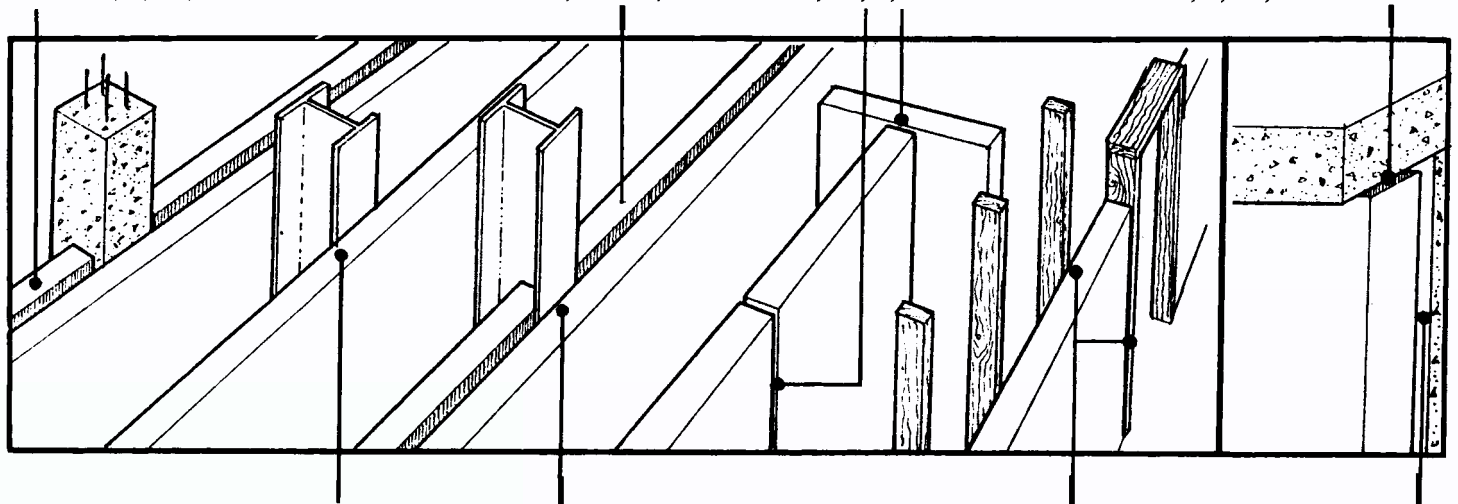
Where to use Cerra's Control Gap Ties

Cavity walls to concrete columns
CGT 6, 7, 9, 10, 10eco, 11.
CGT 1-B, 3, 14, 14 short.

Cavity Wall Tiles
CGT 10, 10eco, 11.

Vertical control gap ties
CGT 1, 1P, 2, 17.

Top of wall to underside of concrete slab
CGT 3, 4, 13, 14 short.



Single leaf wall to steel columns
CGT 5, 5 clip ties, 5 tube clip ties.

Cavity wall to steel columns
CGT 5 Range, 6, 7, 8, 9, 10 range, 11
CGT 1-B, 3, 14, 14 short.

Faced fix ties
CGT 12 range.

Masonry veneer wall over existing Structure
CGT 6, 7, 12 range.

Product Code:

CGT 1 / CGT 1-B (Double Sleeve Tie) / CGT 1-P (Polythene)
Please specify code for stainless steel. E.g. CGT 1 (ss-316).

Description:

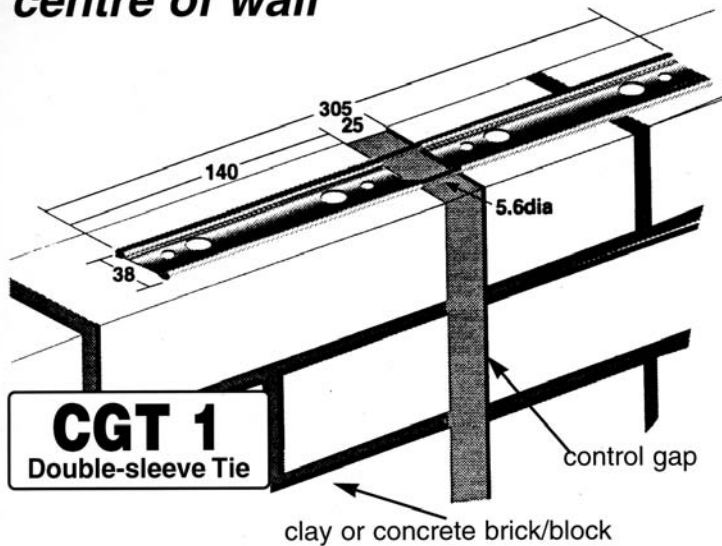
The Cerra Double Sleeve Tie has many applications. Used straight for vertical control gaps or bent to fix to columns or concrete soffits. Double Sleeve Vertical and Control Gap Tie.

Specifications:

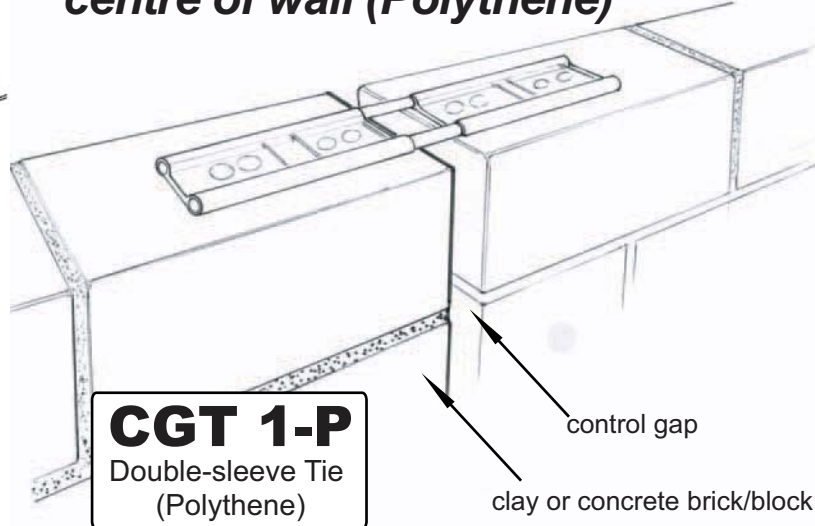
Corrosion Resistance

- *R2 - Galvanised Wire *Expansion Plate GZ-275 / GZ-600
- *R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)
- *CGT 1-P (Material option manufactured with stainless steel 316 slide wires.)

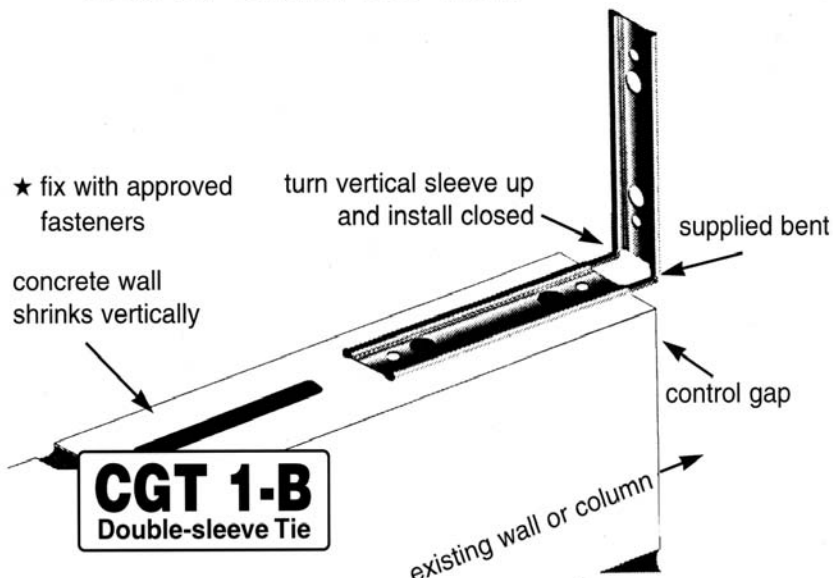
Vertical control gap - centre of wall



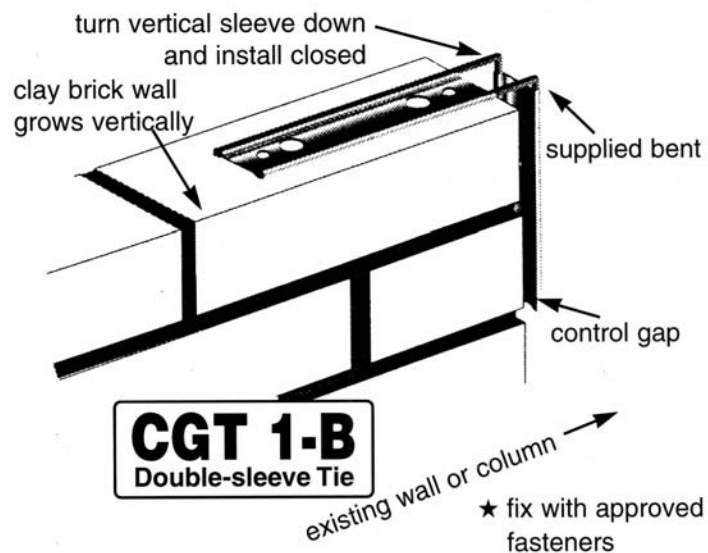
Vertical control gap - centre of wall (Polythene)



Vertical control gap - end of concrete wall



Vertical control gap - end of clay brick wall



Product Code:

CGT 2 / CGT 2-B

Please specify code for stainless steel. E.g. CGT 2-B (ss-316).

Description:

CGT 2 - Single Sleeve Vertical and Control Gap Tie.

CGT 2-B - Single Sleeve Vertical Control Gap Tie (90 degrees bent).

Specifications:

Corrosion Resistance

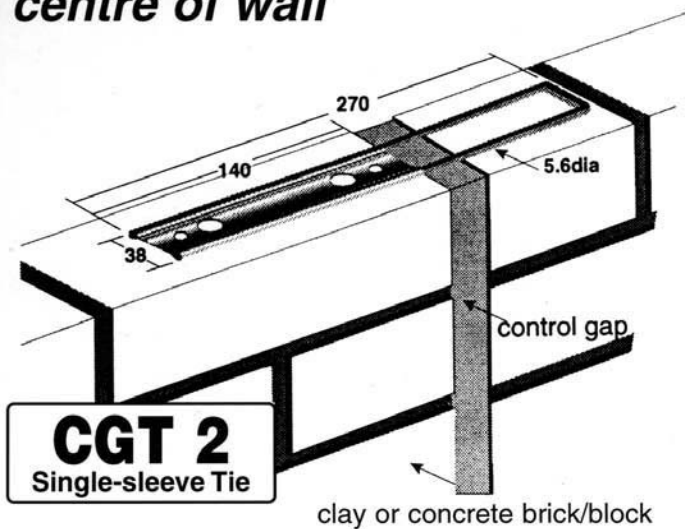
*R2 Galvanised Wire

*Expansion Plate GZ-275 / GZ 600

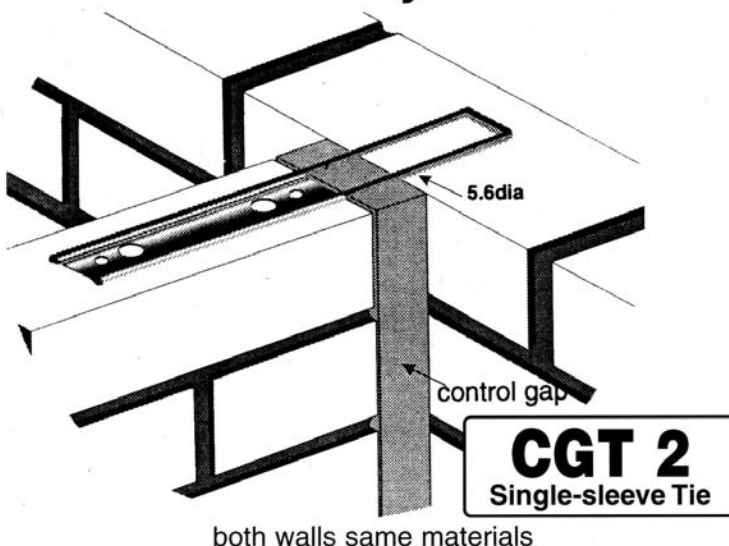
*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

*R3 Polypropelene Expansion Plate (ss-316 slide wires.)

(A) Vertical control gap - centre of wall



(B) Vertical control gap - "T" intersections clay brick wall



Vertical control gap tie - end of brick or block wall



* Fix with approved fasteners

Product Code:

CGT 3

Please specify code for stainless steel. E.g. CGT 3 (ss-316).

Description:

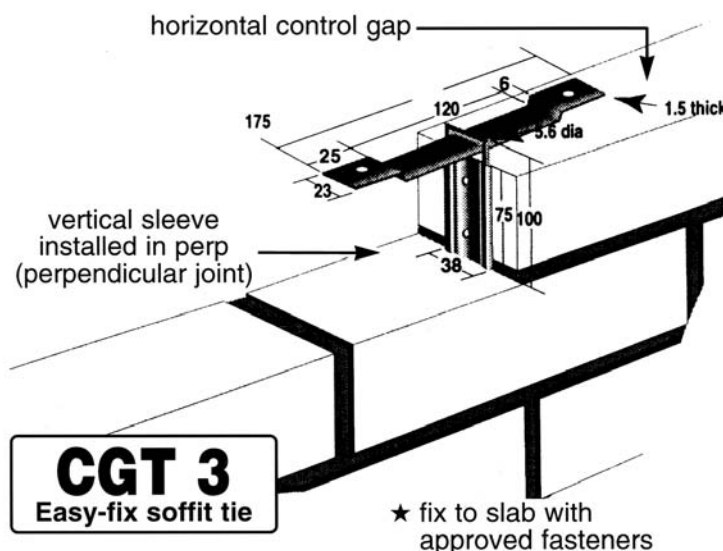
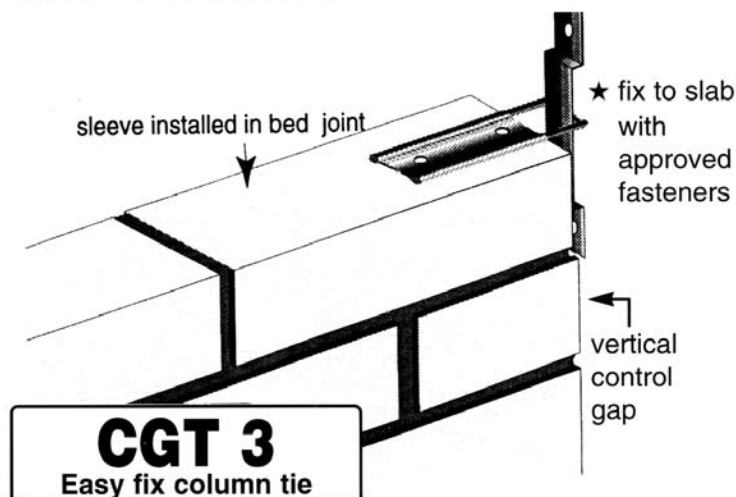
This high strength tie designed to simplify installation. Backplate fastened to soffit/ end column before masonry commences allowing large tolerances for position of perps (perpendicular joints). Vertical sleeve is easily attached to backplate before or during wall construction. CGT 3 also can be used to fix end of new wall to columns of existing walls. Ease Fix Soffit Tie. Top of wall to underside of slab and end of wall to existing wall or column.

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire

*Expansion & Backing Plate GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

(A) Top wall to underside slab**(B) End of wall to existing wall or column**

Product Code:

CGT 4

Please specify code for stainless steel. E.g. CGT 4 (ss-316).

Description:

Double Sleeve Soffit. Control Gap Tie. Top of wall to underside of slab.

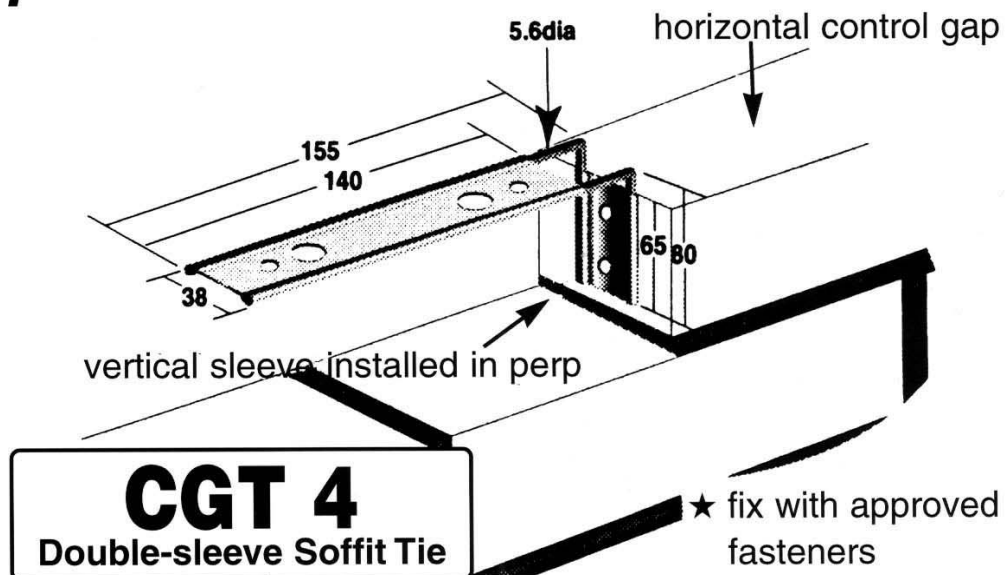
Specifications:**Corrosion Resistance**

*R2 Galvanised Wire

*Expansion Slide GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

Top of wall to underside slab



*Fix with approved fasteners

Product Code:

CGT 5SLT

Please specify code for stainless steel. E.g. CGT 5SLT (ss-316).

Description:

Slide Lock Column Tie. Single leaf wall to vertical steel columns.

Available Sizes:

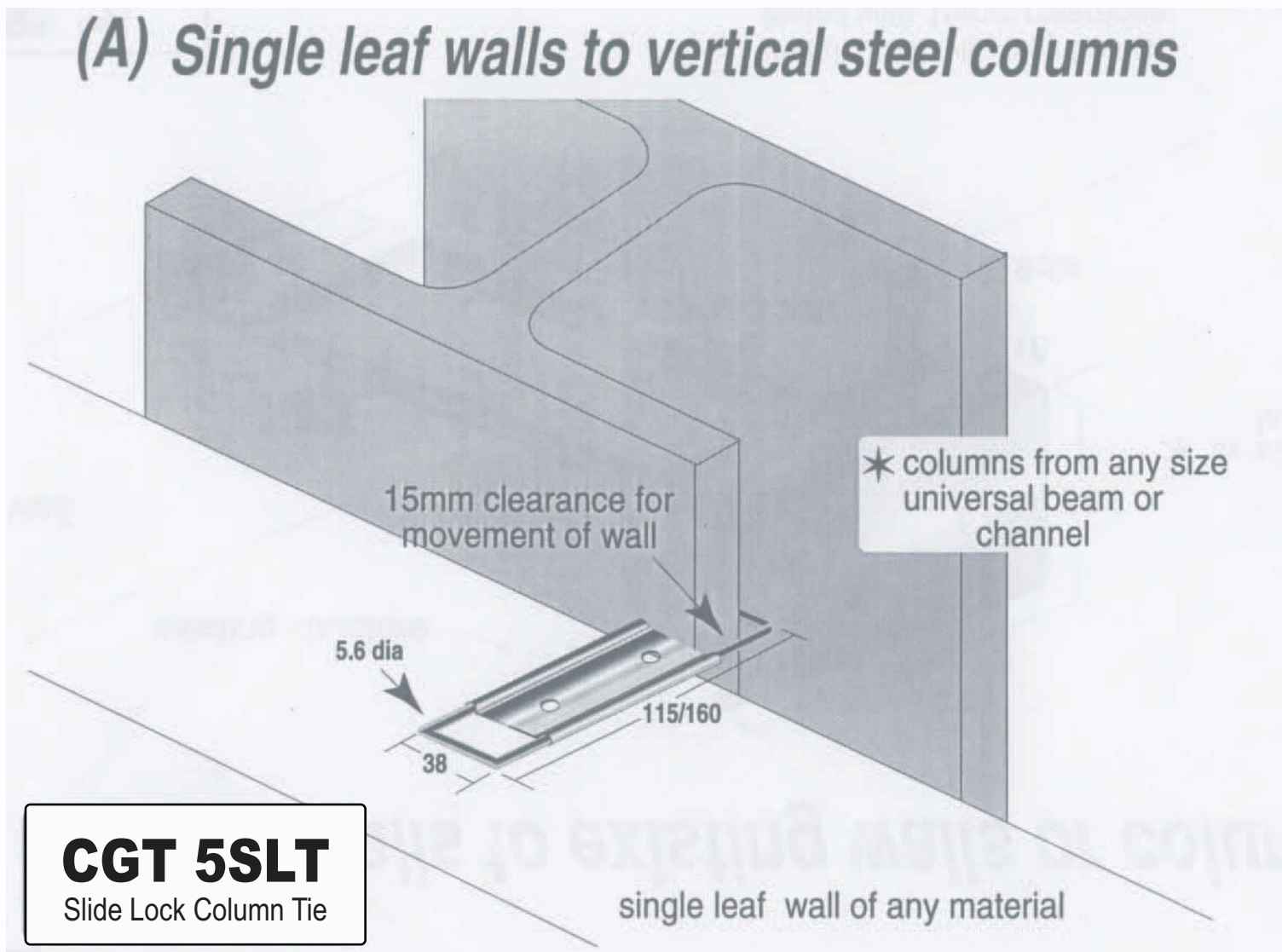
115mm and 160mm

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire

*Slide Plate GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)



Product Code:

CGT 5CCT

Please specify code for stainless steel. E.g. CGT 5CCT (ss-316).

Description:

Column Clip Lock Tie. For single leaf wall to vertical steel columns.

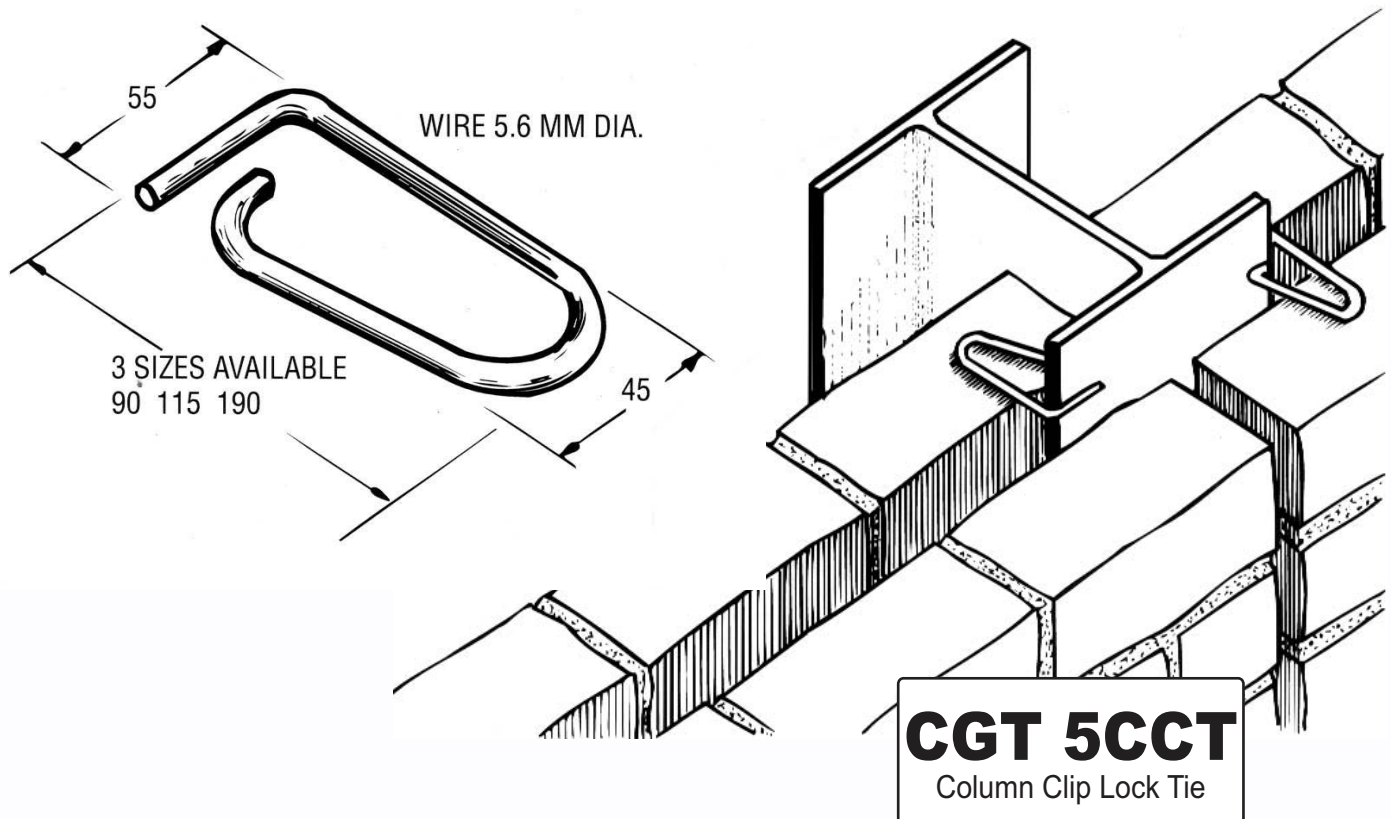
Available Sizes:

90mm, 115mm and 190mm

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire *Hot Dipped Galvanised.

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)



Product Code:

CGT 5TCT

Please specify code for stainless steel. E.g. CGT 5TCT (ss-316).

Description:

Tube Clip Lock Tie. For wall to vertical SHS and RHS columns.

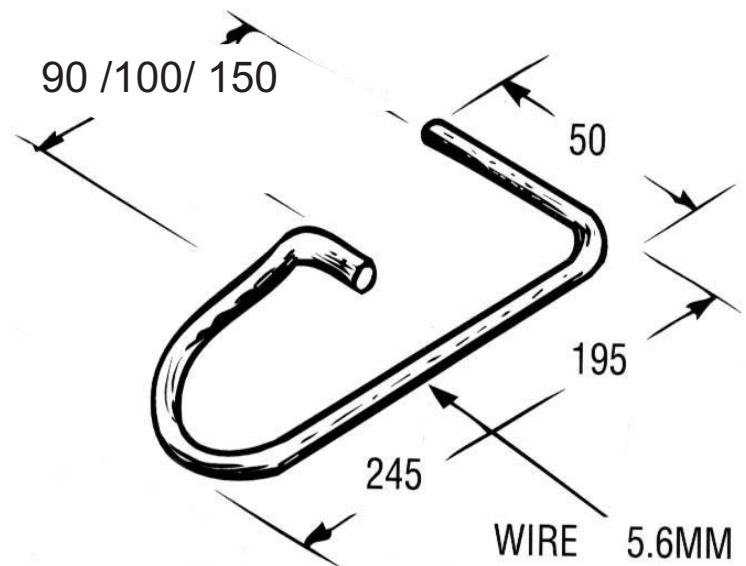
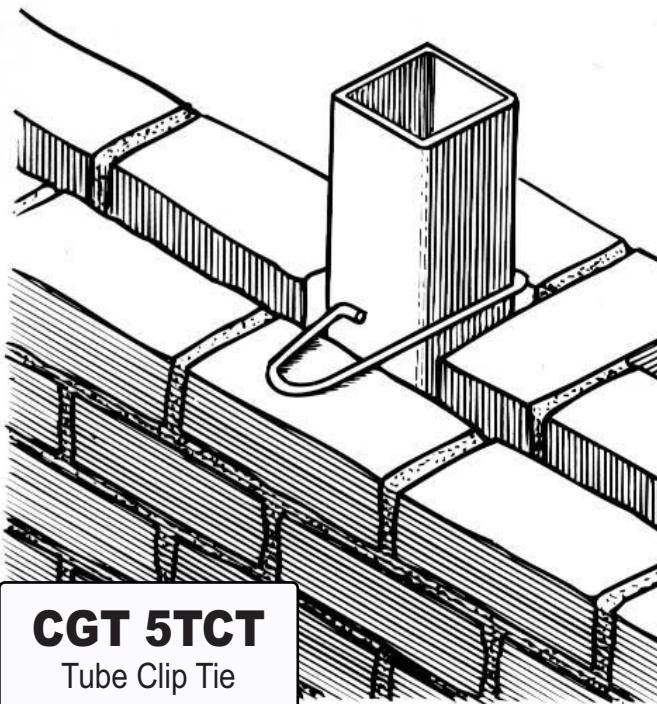
Available Sizes:

90mm, 100mm and 150mm

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire *Hot Dipped Galvanised.

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

Single leaf walls to Tube Columns

90mm Tube

100mm Tube

150mm Tube

Product Code:

CGT 6

Please specify code for stainless steel. E.g. CGT 6 (ss-316).

Description:

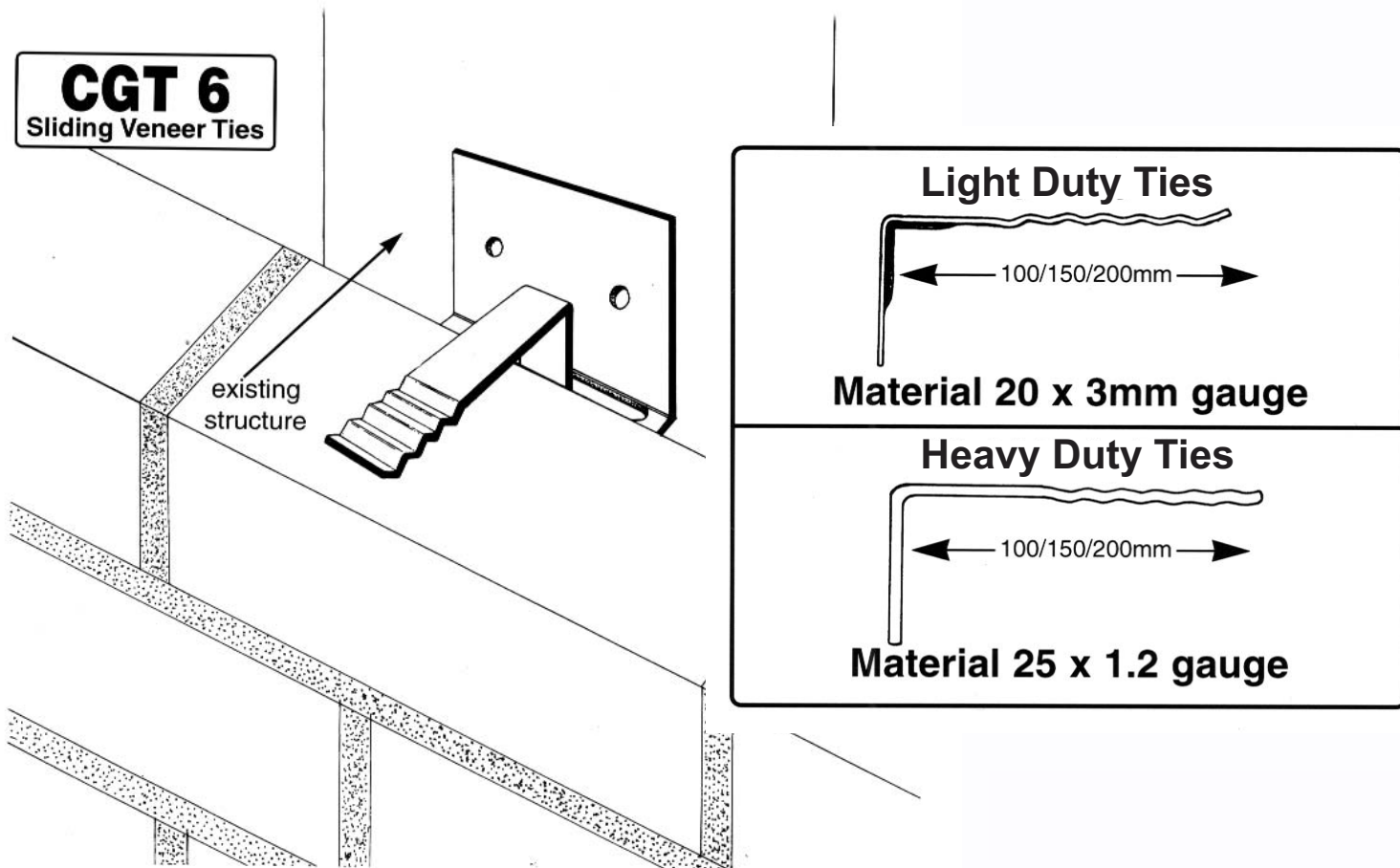
Face Fix Slide Veneer Tie. For fastening masonry to new or existing structures.

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire GZ-275 / GZ 600 *Hot Dipped Galvanised

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

*Install flush with clay bricks to 15mm clearance with other types of masonry.

***Fixing Requirements**

- SHUREDRIVE fasteners or any approved equivalent
- TAPCON masonry screws 14g or any approved equivalent

*Any custom size can be manufactured.

Product Code:

CGT 7

Please specify code for stainless steel. E.g. CGT 7 (ss-316).

Description:

Easy Fix Slide Veneer Tie. For fastening masonry to new or existing structures.

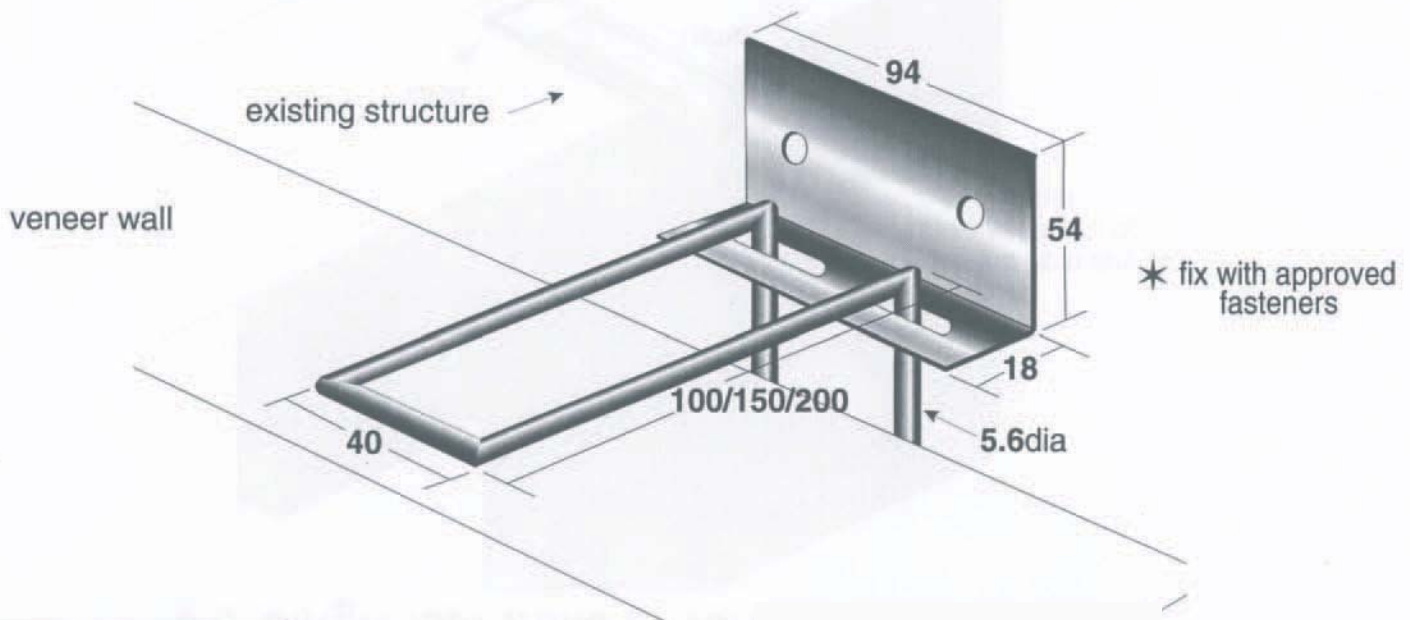
Specifications:**Corrosion Resistance**

*R2 Galvanised Wire GZ-275 / GZ 600 *Hot Dipped Galvanised

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

*Install flush with clay bricks to 15mm clearance with other types of masonry.

(A) Veneer walls to existing walls or columns

**CGT 7**
Sliding veneer tie***Fixing Requirements**

- SHUREDRIVE fasteners or any approved equivalent
- TAPCON masonry screws 14g or any approved equivalent

*Any custom size can be manufactured.

Product Code:

CGT 8

Please specify code for stainless steel. E.g. CGT 8 (ss-316).

Description:

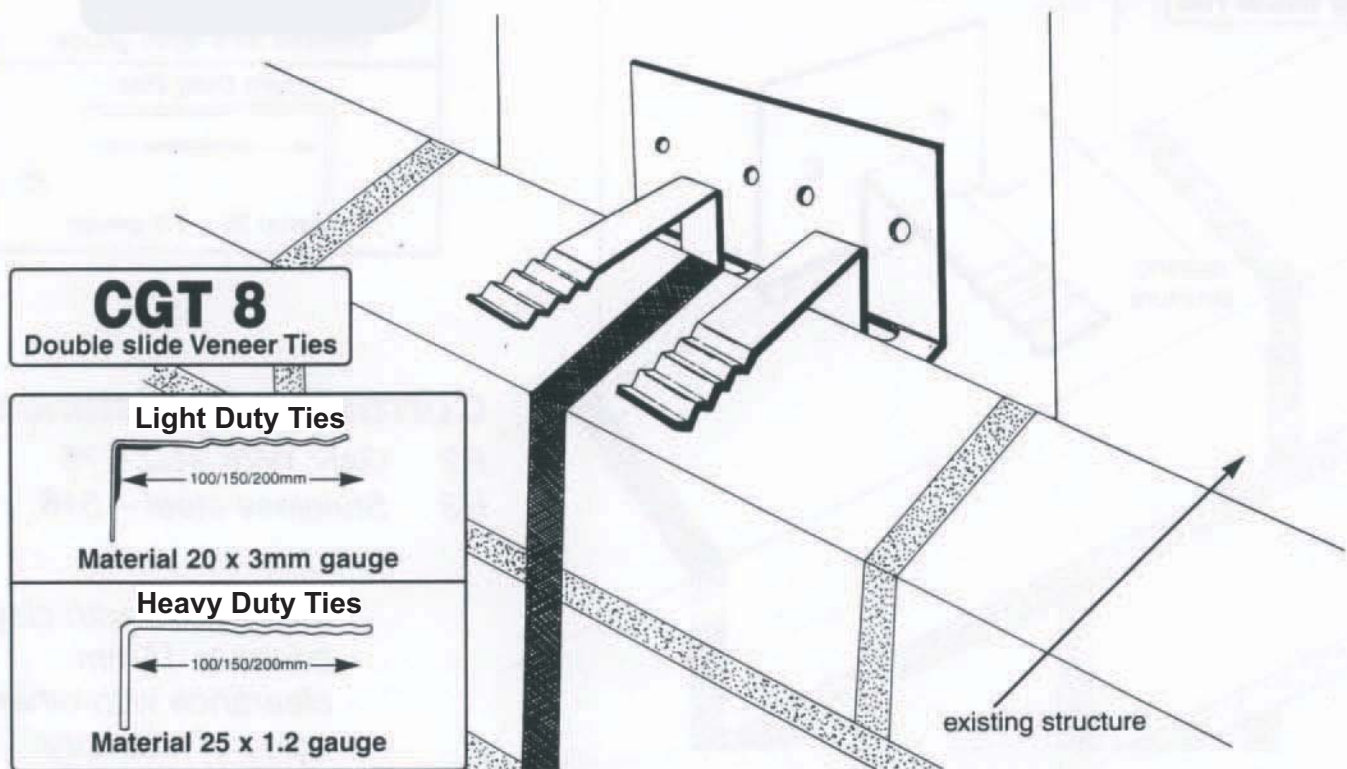
Easy Fix Slide Double Veneer Tie. For fastening masonry to new or existing structures.

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire GZ-275 / GZ 600 *Hot Dipped Galvanised

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

*Install flush with clay bricks to 15mm clearance with other types of masonry.

Single leaf wall over control joint***Fixing Requirements**

- SHUREDRIVE fasteners or any approved equivalent
- TAPCON masonry screws 14g or any approved equivalent

*Any custom size can be manufactured.

Product Code:

CGT 9

Please specify code for stainless steel. E.g. CGT 9 (ss-316).

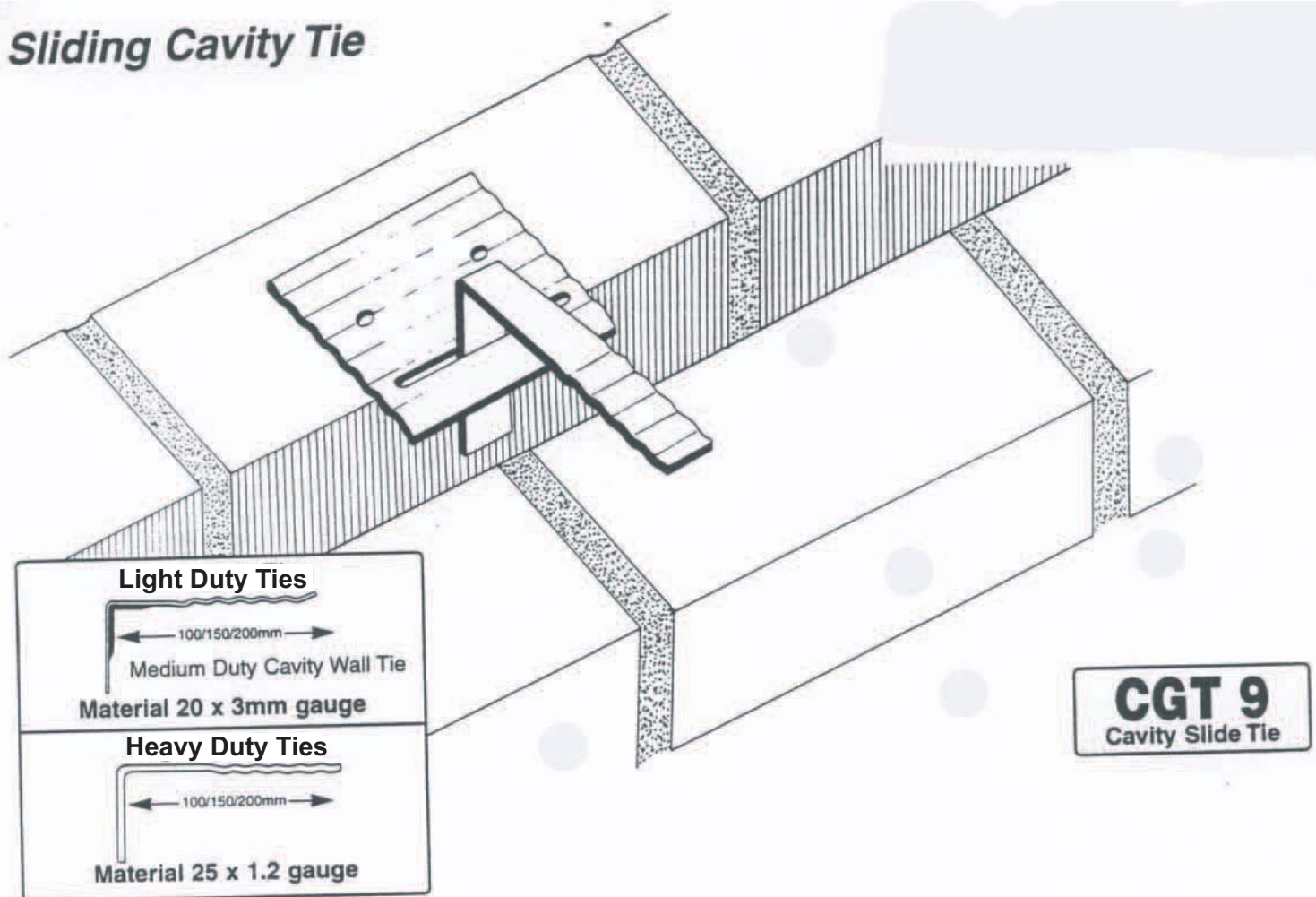
Description:

Cavity Slide Tie.

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire GZ-275 / GZ 600 *Hot Dipped Galvanised

*R3 Stainless Steel - 316 (*Coastal and Industrial areas use only stainless steel 316 brick ties.)

Sliding Cavity Tie

*Any custom size can be manufactured.

Product Code:

CGT 10eco

Please specify code for stainless steel. E.g. CGT 10eco (ss-316).

Description:

Medium Duty Cavity Wall Ties.

Specifications:**Corrosion Resistance**

*R2 GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)
- 50mm cavity (tie length 135mm)**CGT 10eco**Medium Duty Cavity
Wall Ties**Product Code:**

CGT Grip Tie

Please specify code for stainless steel. E.g. CGT (ss-316).

Description:

Grip Tie.

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire GZ-275 / GZ 600

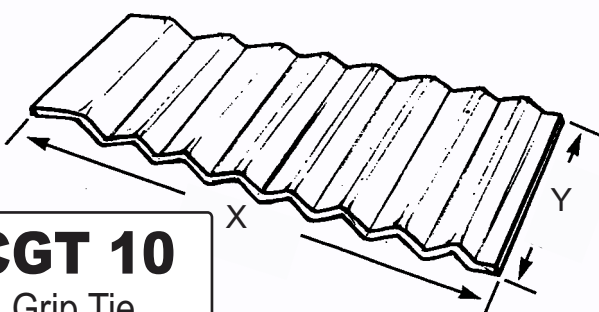
*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

*3mm gauge available in Hot Dipped Galvanised

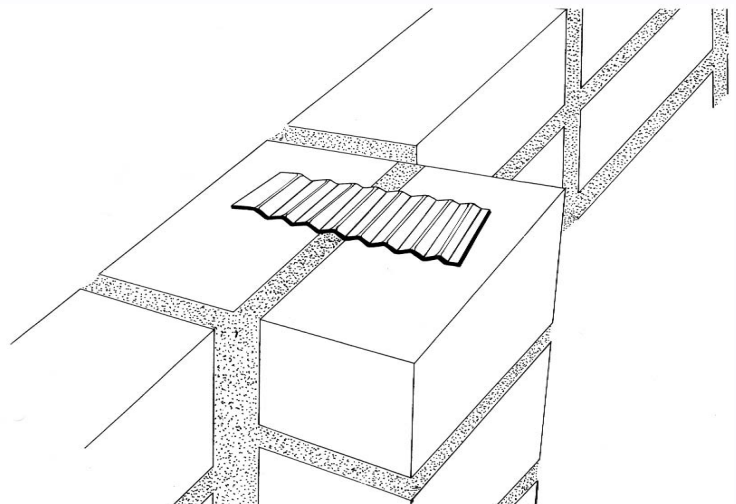
Material Gauges 1.15g / 1.55g / 3.0g

X is available in 100 / 150 / 200 / 250 up to 1000mm

Y is available in 25 / 38 / 50mm

**CGT 10**

Grip Tie



Product Code:

CGT 10

Please specify code for stainless steel. E.g. CGT 10 (ss-316).

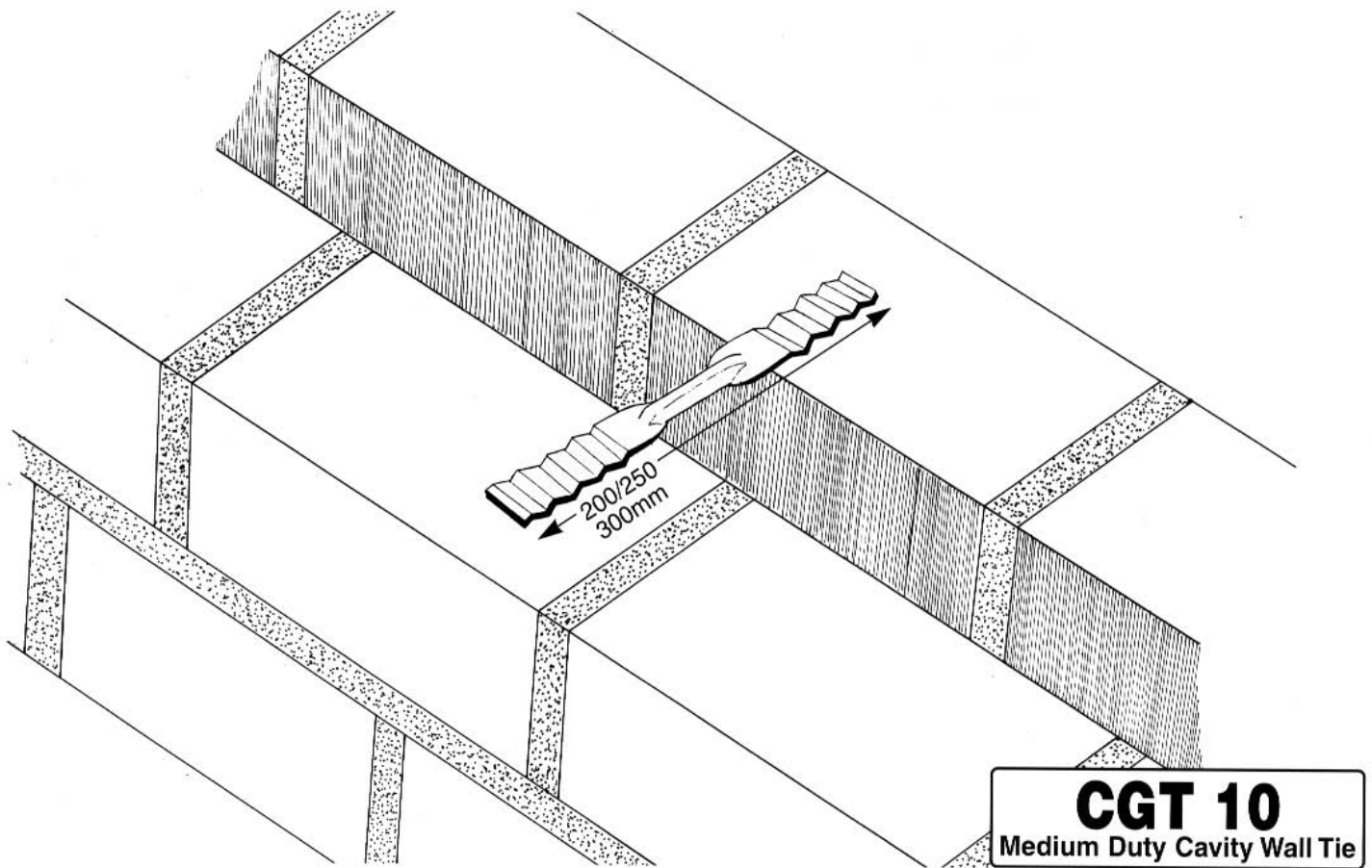
Description:

Medium Duty Cavity Wall Ties.

Specifications:**Corrosion Resistance**

*R2 Galvanised Wire GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)



Product Code:

CGT 11

Please specify code for stainless steel. E.g. CGT 11 (ss-316).

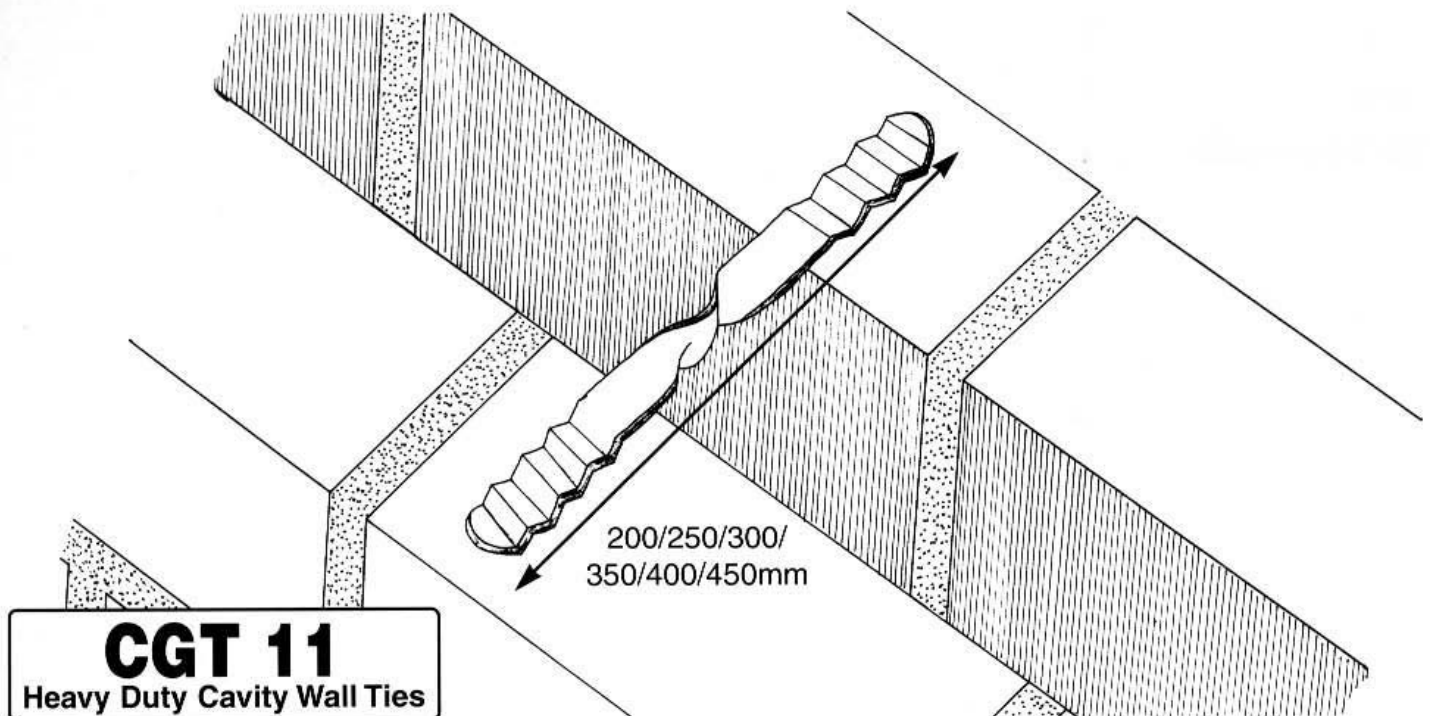
Description:

Heavy Duty Cavity Wall Ties.

Specifications:**Corrosion Resistance**

*R2 Hot Dipped Galvanised

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

Heavy duty cavity wall tie

*Any custom size can be manufactured.

Product Code:

CGT 12

Please specify code for stainless steel. E.g. CGT 12 (ss-316).

Description:

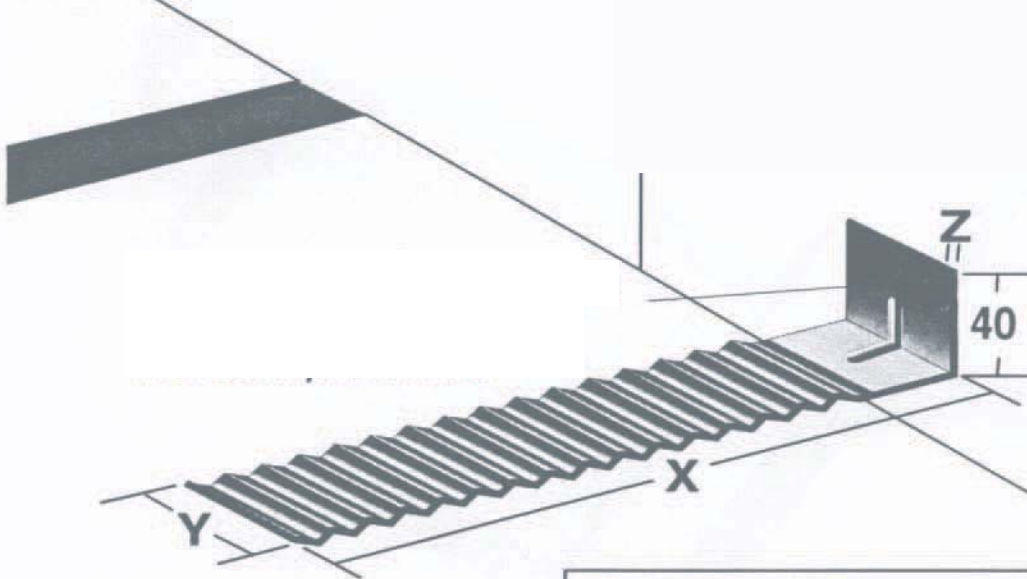
Heavy Frame Ties.

Specifications:

Corrosion Resistance

*R2 Galvanised GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)



Code	Ymm Dimension	Xmm Dimension	Zmm Material Thickness
CGT12-3812	38	100	1.2
		125	
		150	
		200	
		250	
		300	
CGT12-5012	50	100	1.2
		125	
		150	
		200	
		250	
		300	
CGT12-3816	38	100	1.6
		125	
		150	
		200	
		250	
		300	
CGT12-5016	50	100	1.6
		125	
		150	
		200	
		250	
		300	
CGT12-H/D	38	100	3.0
		125	
		150	
		200	
		250	
		300	

CGT 12
Veneer Ties

*Fixing Requirements

- SHUREDRIVE fasteners or any approved equivalent
- TAPCON masonry screws 14g or any approved equivalent
- S/Drilling treated pine screws 8g X 32mm galvanised class 3 finished
- S/Drilling hex head 8g X 12mm galvanised class 3 finished
- 30mm X 2.8mm dia galvanised connector nail

Product Code:

CGT 12

Please specify code for stainless steel. E.g. CGT 12 (ss-316).

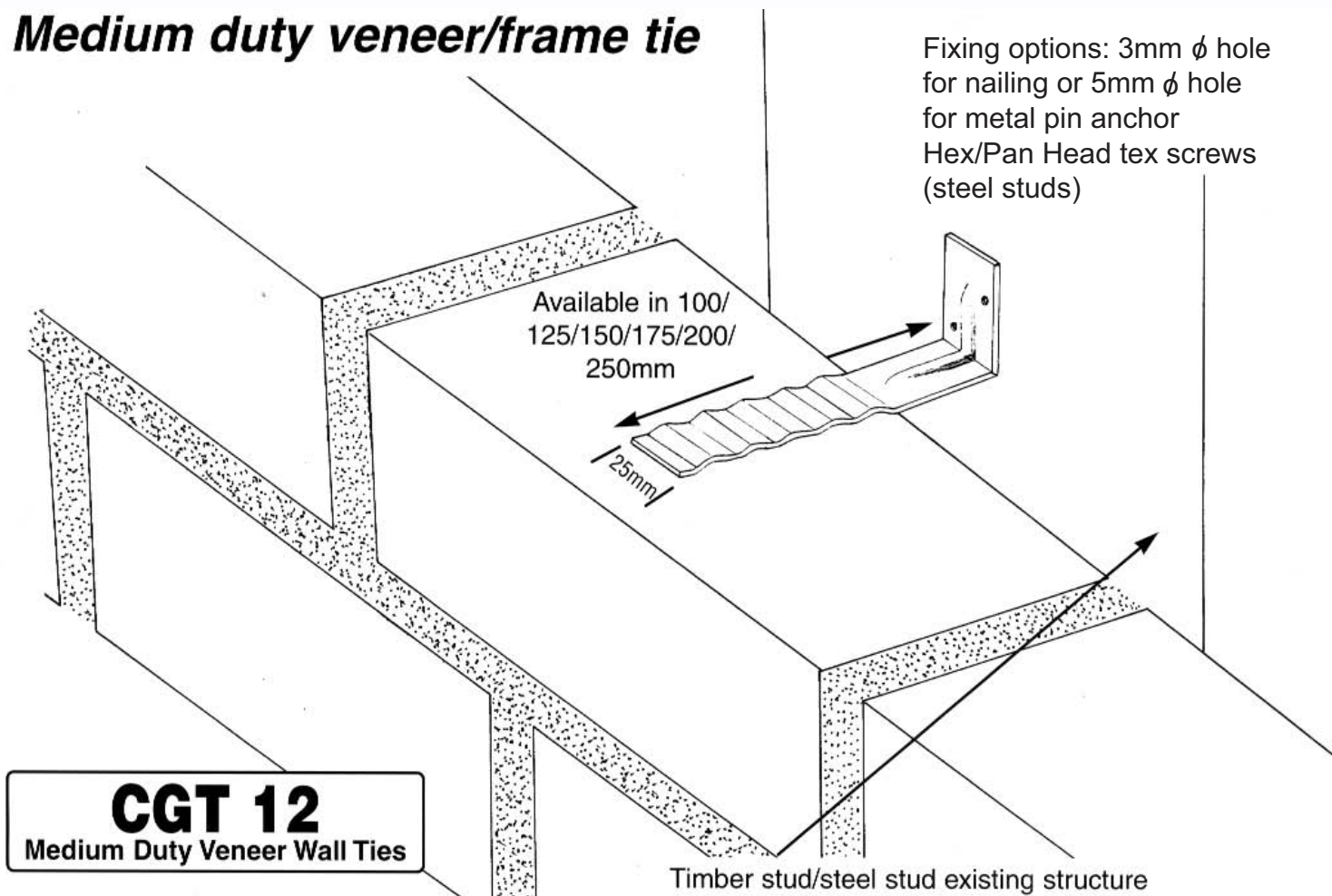
Description:

Medium Duty Veneer Wall Ties.

Specifications:**Corrosion Resistance**

*R2 Galvanised GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

Medium duty veneer/frame tie***Fixing Requirements**

- SHUREDRIVE fasteners or any approved equivalent
- TAPCON masonry screws 14g or any approved equivalent
- S/Drilling treated pine screws 8g X 32mm galvanised class 3 finished
- S/Drilling hex head 8g X 12mm galvanised class 3 finished
- 30mm X 2.8mm dia galvanised connector nail

Product Code:

CGT 12eco Frame Ties

Please specify code for stainless steel. E.g. CGT 12eco Frame Ties (ss-316).

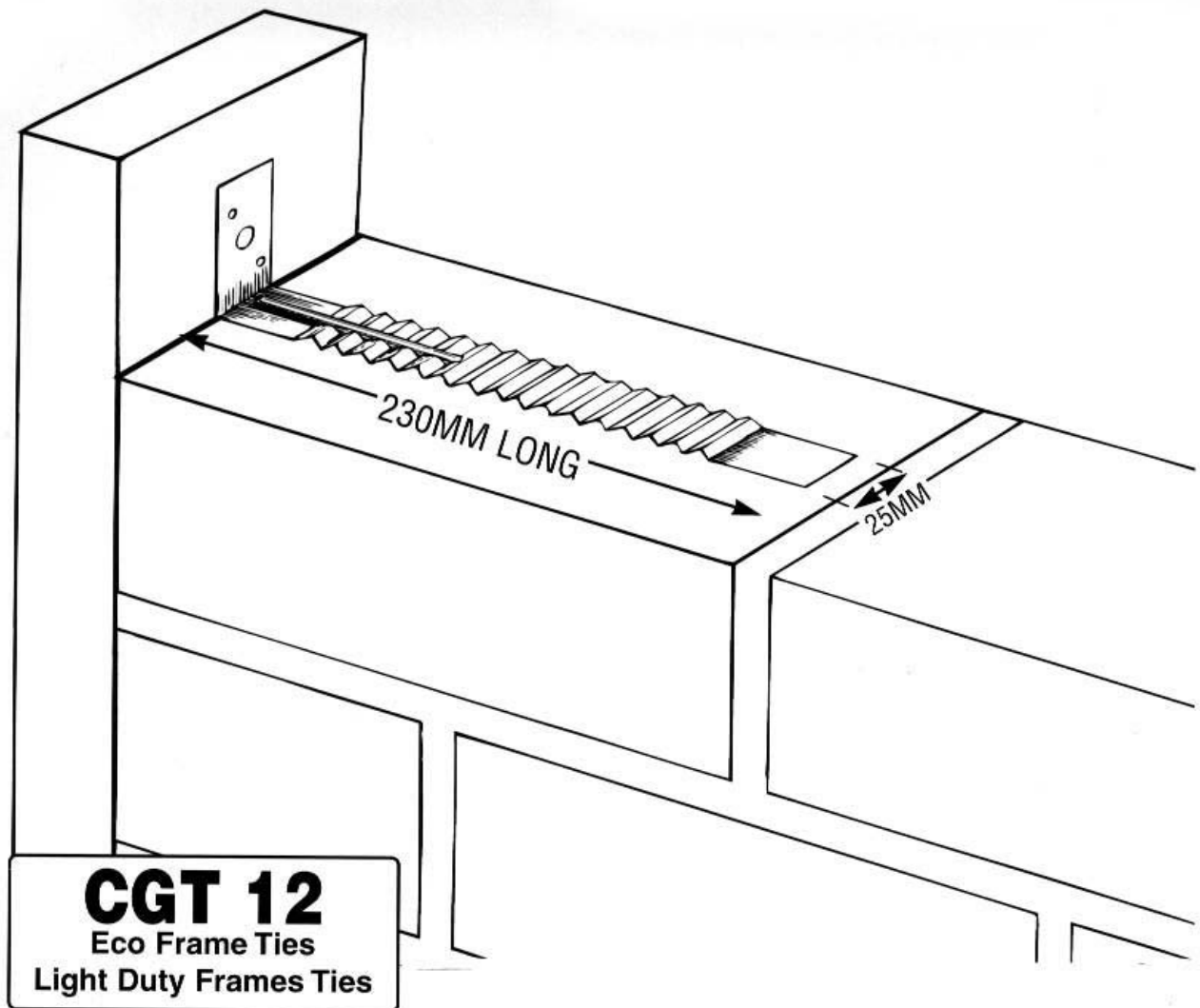
Description:

Light Duty Frame Ties.

Specifications:**Corrosion Resistance**

*R2 Galvanised GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

***Fixing Requirements**

- SHUREDRIVE fasteners or any approved equivalent
- TAPCON masonry screws 14g or any approved equivalent
- S/Drilling treated pine screws 8g X 32mm / 10g X 32mm galvanised class 3 finished
- S/Drilling hex head 8g X 12mm galvanised class 3 finished
- 30mm X 2.8mm dia galvanised connector nail

Product Code:

CGT 13 / CGT 14

Please specify code for stainless steel. E.g. CGT 13 (ss-316).

Description:

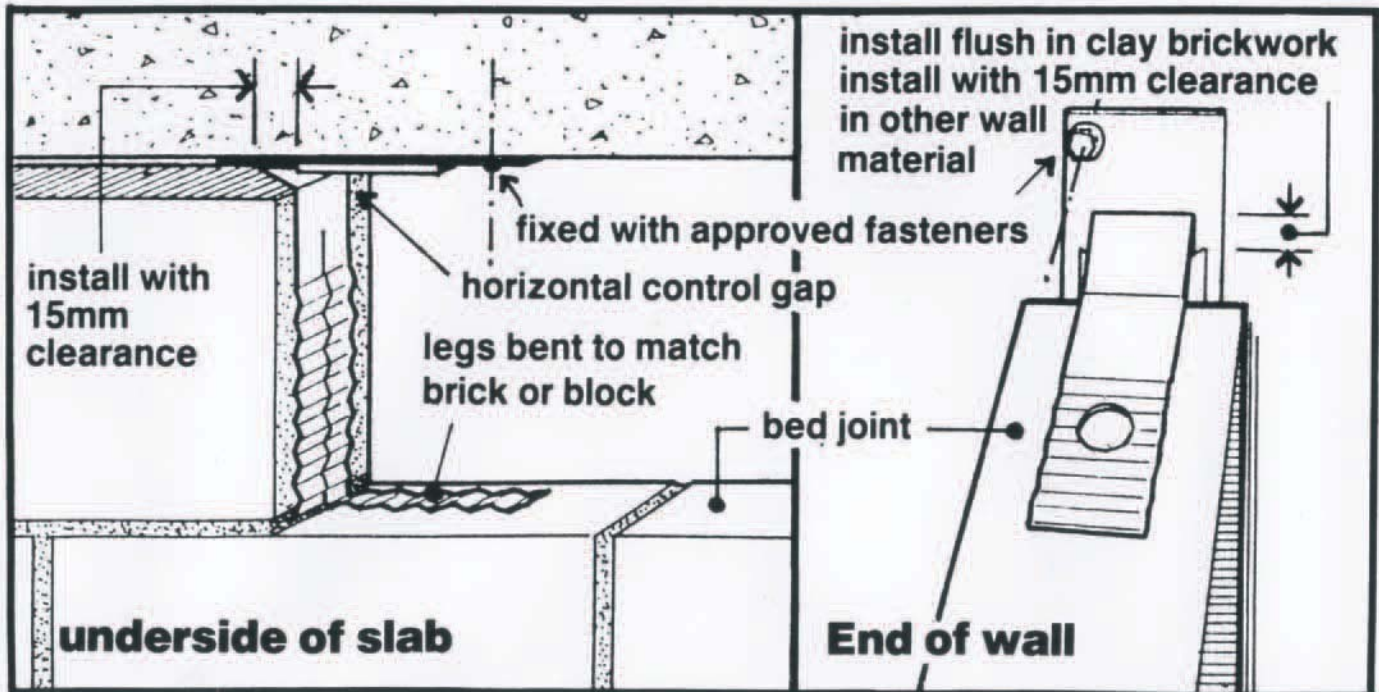
CGT 13 - Twin Leg Control Gap Ties.

CGT 14 - Single Leg (Vertical) Control Gap Tie.

Specifications:**Corrosion Resistance**

*R2 Galvanised GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

CGT13 Twin leg control gap tie**CGT14 Vertical control gap tie**

Product Code:

CGT 14 Short

Please specify code for stainless steel. E.g. CGT 14 Short (ss-316).

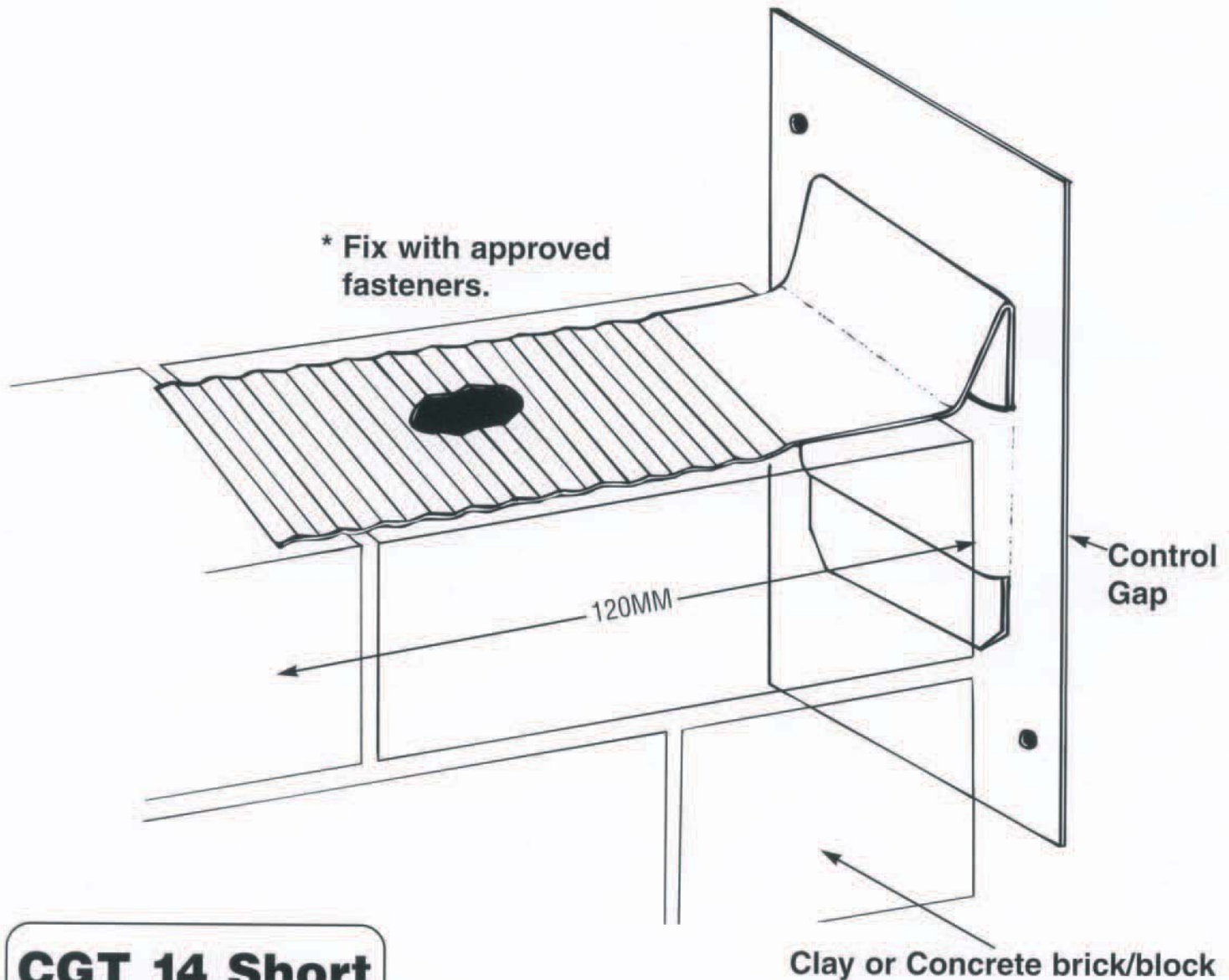
Description:

Single Leg Control Gap Tie.

Specifications:**Corrosion Resistance**

R2 Galvanised GZ-275 / GZ 600

R3 Stainless Steel - 316 (*Coastal and Industrial areas use only stainless steel 316 brick ties.)



CGT 14 Short
Single Leg Control
Gap Tee

Product Code:

CGT 15, CGT 16 and CGT 16T

Please specify code for stainless steel. E.g. CGT 15 (ss-316).

Description:

CGT 15 - Single Leaf Wall Roof Straps.

CGT 16 and CGT 16T - Cavity Wall Roof Straps.

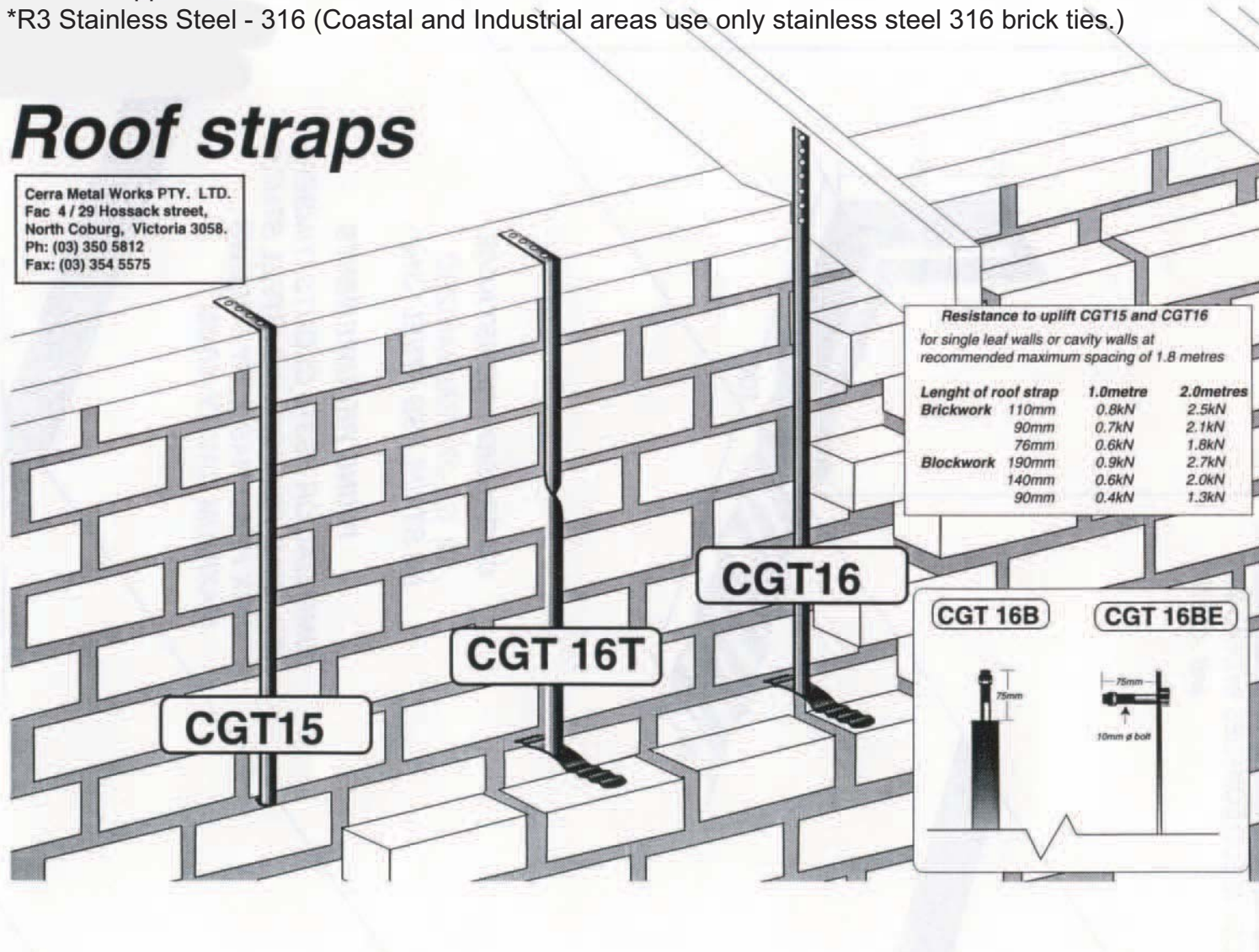
Specifications:**Corrosion Resistance**

*R2 Hot Dipped Galvanised

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

Roof straps

Cerra Metal Works PTY. LTD.
Fac 4 / 29 Hossack street,
North Coburg, Victoria 3058.
Ph: (03) 350 5812
Fax: (03) 354 5575



Resistance to uplift CGT15 and CGT16
for single leaf walls or cavity walls at
recommended maximum spacing of 1.8 metres

Lenght of roof strap	1.0metre	2.0metres
Brickwork 110mm	0.8kN	2.5kN
90mm	0.7kN	2.1kN
76mm	0.6kN	1.8kN
Blockwork 190mm	0.9kN	2.7kN
140mm	0.6kN	2.0kN
90mm	0.4kN	1.3kN

CGT 16B**CGT 16BE*****Fixing Requirements**

- S/Drilling treated pine screws 8g X 32mm galvanised class 3 finished
- S/Drilling hex head 8g X 12mm galvanised class 3 finished

Product Code:

CGT 17

Please specify code for stainless steel. E.g. CGT 17 (ss-316).

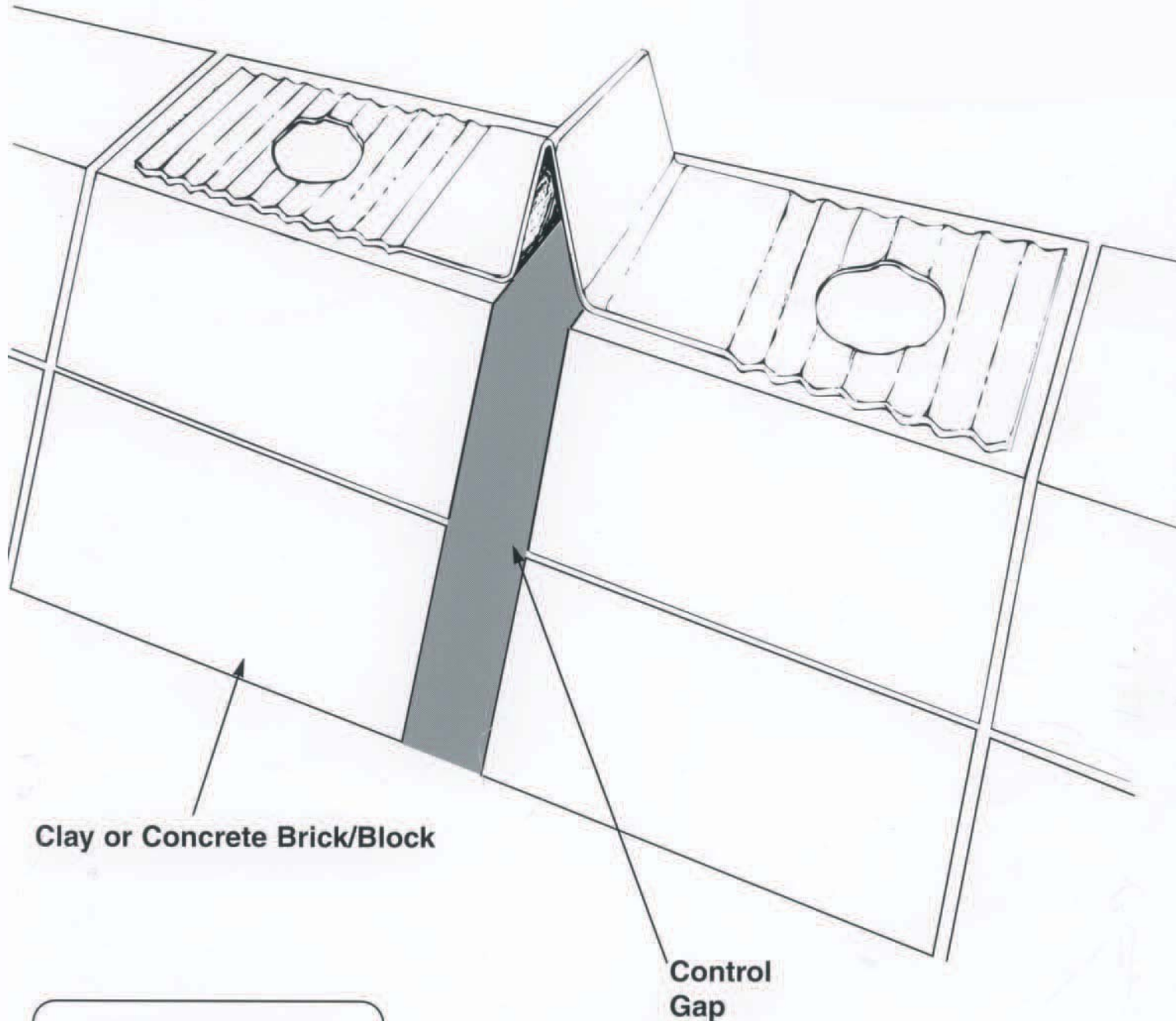
Description:

Vertical Control Gap Tie.

Specifications:**Corrosion Resistance**

*R2 Galvanised GZ-275 / GZ 600

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

**CGT 17**
V Form Tie

Product Code:

SA 1 and SA 2

Please specify code for stainless steel. E.g. SA 1 (ss-316).

Description:

Cerra Slab Anchore Ties.

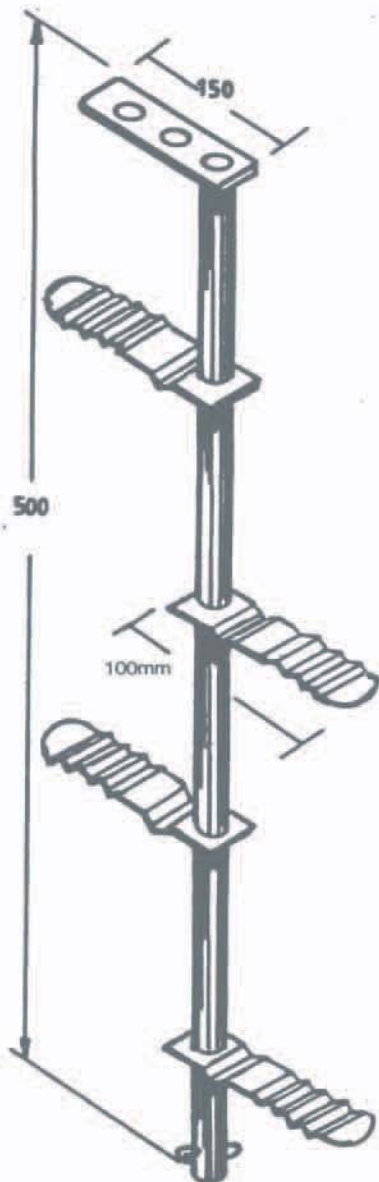
SA 1 - Bolt On Type.

SA 2 - Cast On Type.

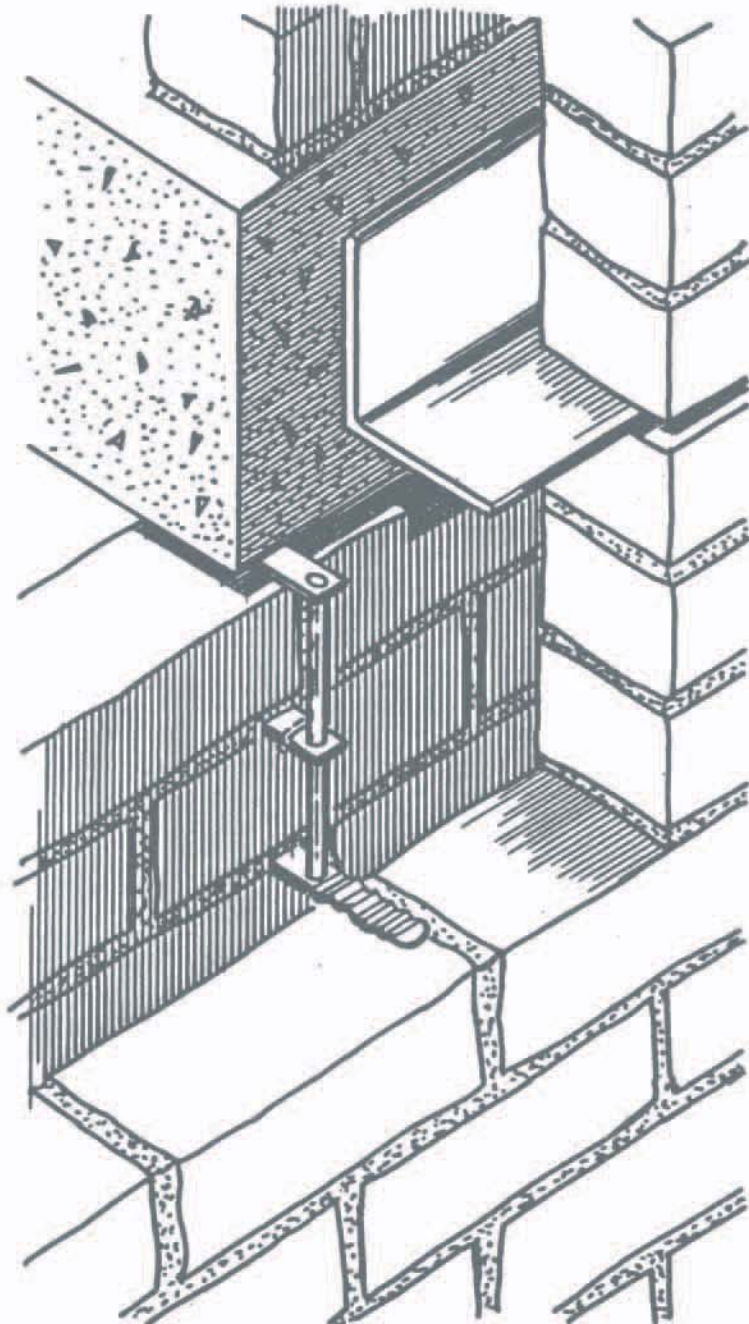
Specifications:**Corrosion Resistance**

*R2 Galvanised Hot Dipped Galvanised

*R3 Stainless Steel - 316 (Coastal and Industrial areas use only stainless steel 316 brick ties.)

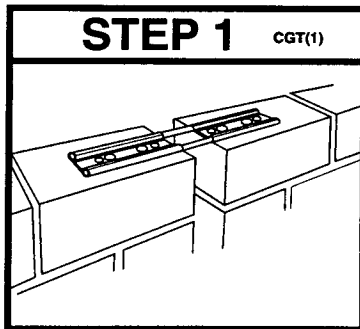


SA 1
Bolt on Type

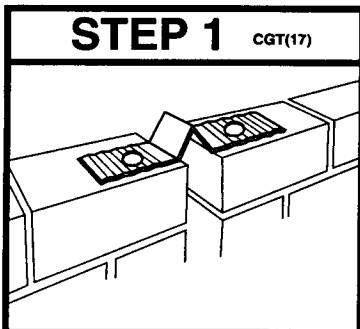


SA 2
Cast on Type

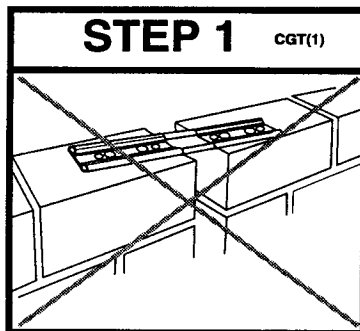
INSTALLATION PROCEDURES



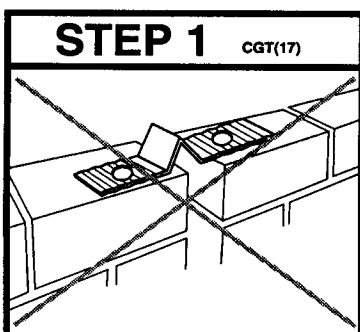
Position **CGT 1** or **CGT 17** over control gap, Making sure tie is parallel with centre of wall and also checking that expansion / Contraction length is equal to control gap.



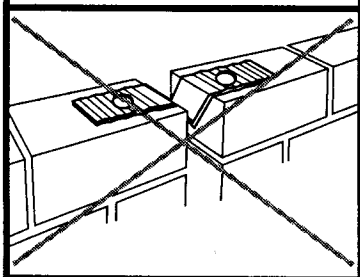
- Lay brick over tie, using plenty of mortar to fully embed tie into masonry.
- Once wall is complete Clean & Seal joint with an aproved Control Gap Sealant.



Postioning a **CGT 1** unparallel to centre of wall, will cause the expansion ties to seize up. Creating the masonry to not absorb differential movement.



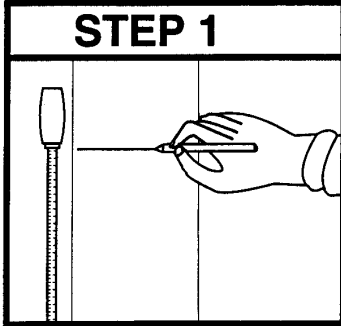
Postioning a **CGT17** unparallel to centre of wall, will cause the expansion ties to seize up. Creating the masonry to not absorb differential movement.



Do not lay tie upside down mortar droppings may easily fall in slot cuasing tie to seize up.

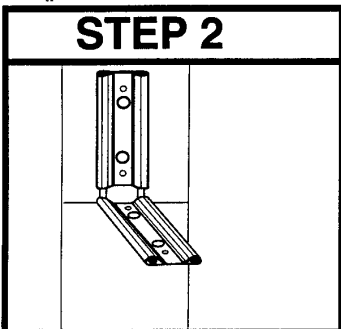
INSTALLATION PROCEDURES

STEP 1



Mark all centres of courses on column or wall which masonry wall will abutt to.

STEP 2



Fix so that embedded tie lines up with the centre of course.

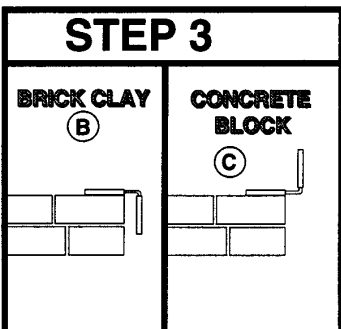
(As shown ... Two fixings required)

FIXING INFORMATION

When stainless steel ties are being used, fastners also must be to the same corrosion specification.

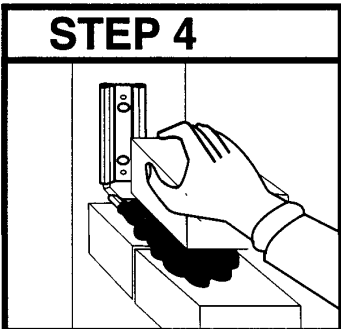
Two fastners must be used on any one tie.

STEP 3



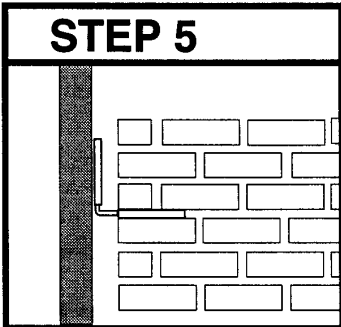
CLAY BRICK ... Wall grows vertically, turn vertical sleeve down and install closed.
CONCRETE BLOCK ... Shrinks vertically turn vertical sleeve up and install closed.

STEP 4



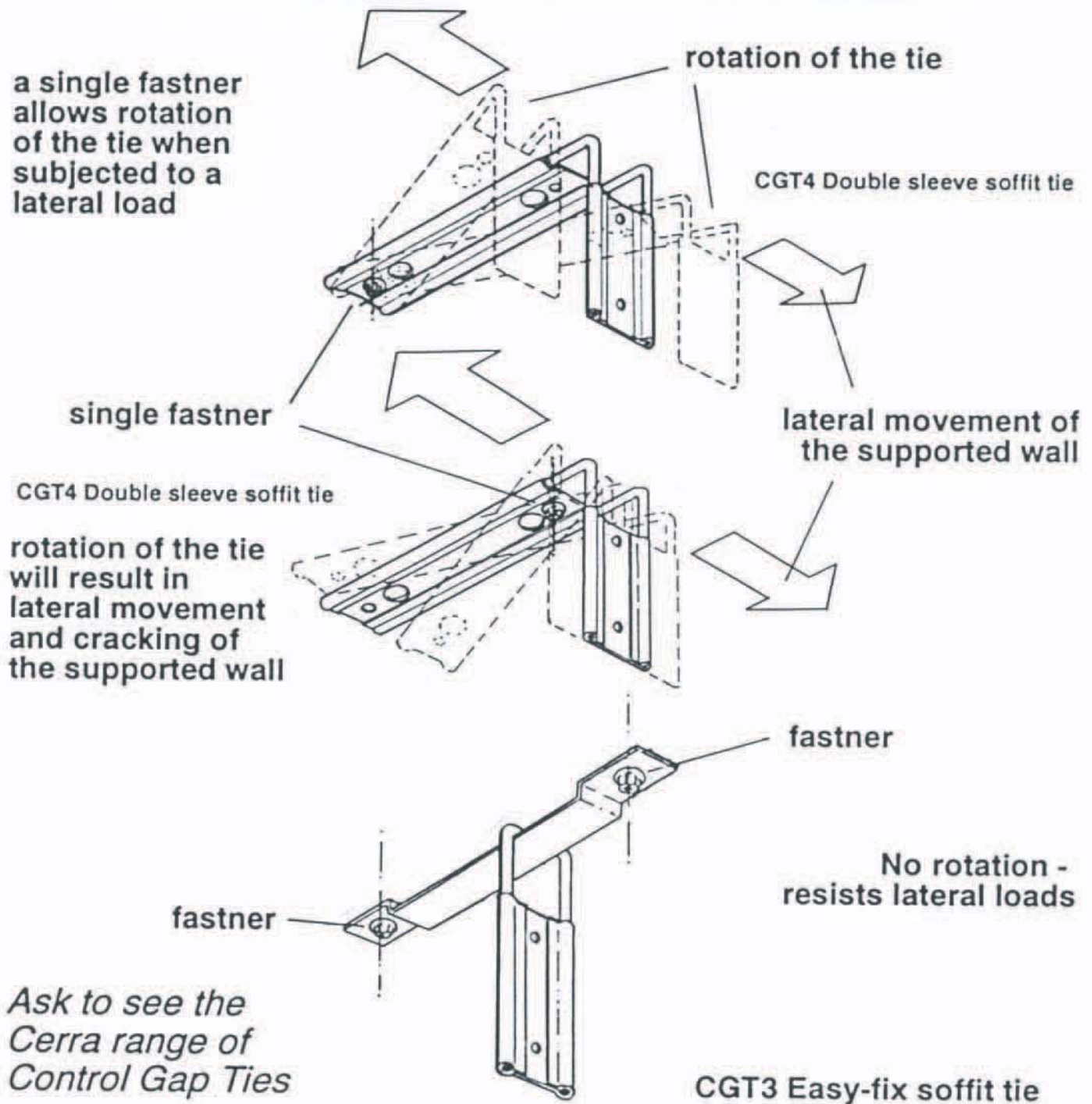
Continue laying bricks making sure tie is parallel with wall. Ties are normally spaced 600mm apart unless specified differently.

STEP 5



When wall is complete, clean control gap and ties from all mortar droppings
Seal with an approved control gap sealer.

One masonry fastener is not enough!



All wall ties must be fixed with a minimum of TWO approved fasteners

think safety - think Cerra

Product Code:

CGT 12 + nail

Please specify code for stainless steel. E.g. CGT 12 + nail (ss-316).

Description:

Brick venner with a pre-attached nail. Making the installation process quick, safe and much simpler.

Specifications:

Corrosion Resistance

R2 Galvanised GZ-275

R3 Stainless Steel - 316 (*Coastal and Industrial areas use only stainless steel 316 brick ties.)

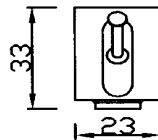
ONE
CONNECTOR
PLATE NAIL
READY TO BE
TILTED AND
FIXED

PATENTED
PROPYLENE
SNAP-IN CLIP
TO HOLD HEX
HEAD IN
PLACE

SINGLE HANDED
TILTING ACTION
FOR NAIL

PRE-SET
CONNECTOR
PLATE NAIL TO
EASE FIXING
PROCESS

100



CGT 12eco + nail

Brick Venner with
pre-attached nail

