STAINLESS STEEL R4 BRICK VENEER TIES

Compliant with the requirements of AS2699 and AS3700.

316 STAINLESS STEEL

APPLICATION

VUETRADE R4 Brick Veneer Ties are made of Stainless Steel 316, and allow for higher resistance than that of R2 or R3 Ties.

They are suitable for use with TIMBER FRAMES only.
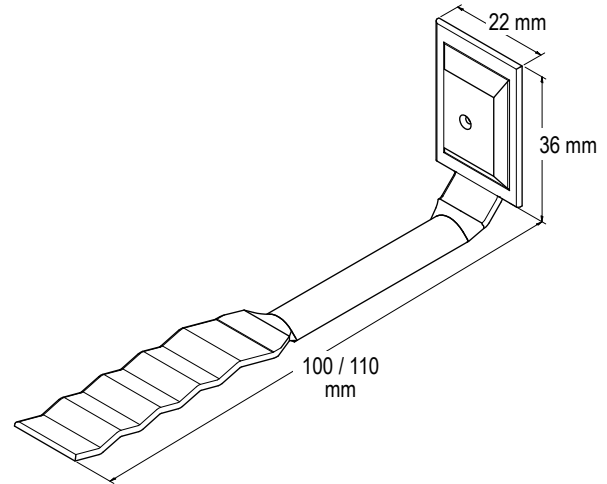
LIGHT DUTY WITH NAILS

R4

SPECIFICATION

VUETRADE Light Duty Brick Veneer Ties are rated as light duty conforming to AS2699.1:2020 and AS3700:2018.

Cavity Width	50mm
Usage	Within 1km from breaking surf, or within 100m from sheltered coastal
Fixing	Use only the supplied VUETRADE 30mm x 3.2mm Ø Stainless Steel Fixing Nail

MEDIUM DUTY WITH SCREWS

R4

SPECIFICATION

VUETRADE Medium Duty Brick Veneer Ties are rated as medium duty conforming to AS2699.1:2020 and AS3700:2018.

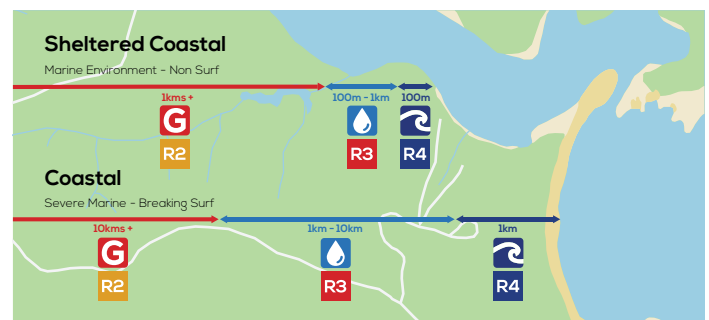|	
Cavity Width	50mm
Usage	Within 1km from breaking surf, or within 100m from sheltered coastal
Fixing	Use only the supplied VUETRADE 30mm x 4.5mm Ø Stainless Steel Fixing Screw

DETAILS

Product Code	Material	Durability Classification	Box Qty
VBTLDR4	SS 316	R4	150
VBTMDR4	SS 316	R4	150

22 mm
36 mm
100 / 110 mm

50 mm cavity width

R4 DURABILITY CLASSIFICATION

Within 1km from breaking surf, or within 100m from sheltered coastal

Sheltered Coastal
Marine Environment - Non Surf

1kms + **G** R2   100m - 1km **R3**   100m **R4**

Coastal
Severe Marine - Breaking Surf

10kms + **G** R2   1km - 10km **R3**   1km **R4**

The suitability of brick ties in different environmental conditions can be determined by reading off the specification area chart based on the type of environment and the distance where the brick ties will be used.

It is important to use the recommended brick tie classification to reduce the risk of brick tie corrosion that may affect the overall structure integrity.

Note: VUETRADE does not cover corrosion protection on heavy industrial areas as additional or highly specific requirements may be required.

National Construction Code 2022 – ABCB Housing Provisions

Table 5.6.5d from ABCB Housing Provisions of the NCC 2022 provides corrosion protection requirements for masonry wall ties in different exposure conditions along with recommended corrosion protections.

Table 5.6.5d Corrosion protection for wall ties

Exposure condition	Tie specification (minimum corrosion protection)
Areas less than 1km from breaking surf; or less than 100 m from salt water not subject to breaking surf; or within heavy industrial areas.	Grade 316L stainless steel; or engineered polymer complying with the requirements of AS 2699.1.
Areas 1km or more but less than 10km from breaking surf; or 100m or more but less than 1km from salt water not subject to breaking surf.	Sheet steel and bar ties galvanised after manufacture - 470 g/m2 on each side; or galvanised wire ties - 470 g/m2 coating mass; or Grade 304L stainless steel.
All other areas	Galvanised sheet steel - 300 g/m2 coating on each side; or sheet steel ties galvanised after manufacture - 300 g/m2 on each side.

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SELECTION OF SUITABLE CORROSION PROTECTION ON VUETRADE PRODUCTS

VUETRADE offers products designed for use specifically in each exposure condition with adequate corrosion protection as per the requirement. These are categorised into three main categories:

G

STANDARD / GALVANISED
- Internal / enclosed
- Exterior/exposed inland areas except if in contact with fresh water or non-saline wetting & drying

MARINE ENVIRONMENT – SS304
- Marine Environment – 100m up to 1km from a non-surf coast and from 1km up to 10km from a surf coast
- External applications in contact with freshwater or subject to non-saline wetting and drying
- Minimum steel grade required Stainless Steel 304

SEVERE MARINE – SS316
- Severe Marine – 100m from a non-surf coast and up to 1km from a surf coast
- Minimum Steel Grade Stainless Steel 316
- No 'Tea Staining', a superficial 'rust' look that occurs on lower grades of Stainless Steel including 304.

Using the chart below, the necessary level of corrosion protection can be easily identified. It is highly recommended to adhere and comply to the minimum requirement of corrosion protection as failure to do so may lead to severe corrosion that will critically alter the structural integrity of a building.

Corrosion protection usage outside of what has been recommended in this guideline should be consulted and confirmed by the site engineer/structural engineer to ensure building compliance.

These classifications are based on AS2699.1:2020.

Fresh Water
Contact with Fresh Water or Non Saline Wetting & Drying = Marine Environment
R3

Coastal
Severe Marine - Breaking Surf
100m | 1km – 10km | 1km
R4 | R3 | R4

Sheltered Coastal
Marine Environment - Non Surf
1kms + | 100m – 1km | 100m
R2 | R3 | R4

Coastal
Severe Marine - Breaking Surf
10kms + | 1km – 10km | 1km
R2 | R3 | R4

VUETRADE ICON	DURABILITY CLASSIFICATION	MATERIAL
G	R2	Z600 Galvanised
(water)	R3	304 Stainless Steel
(wave)	R4	316 Stainless Steel