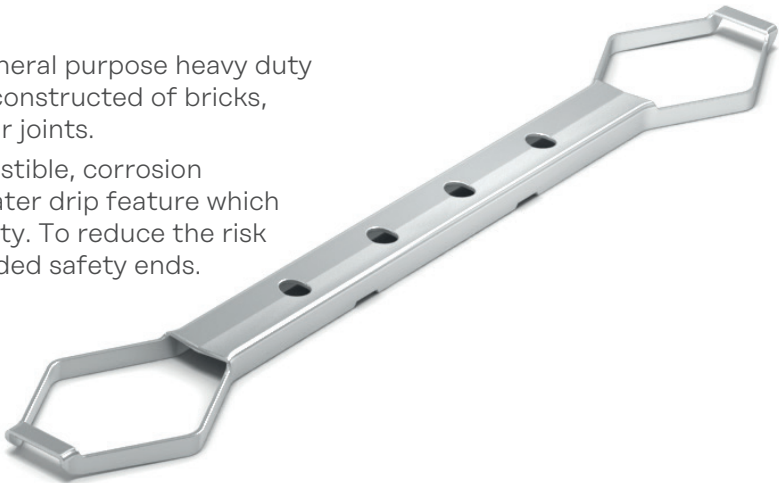


Ancon®

Ancon AHD-C 200 Cavity Wall Tie

The Ancon AHD-C 200 Cavity Wall Tie is a general purpose heavy duty wall tie to connect two leaves of a cavity wall constructed of bricks, concrete blocks or stone with standard mortar joints.

The wall tie is manufactured from non-combustible, corrosion resistant stainless steel and has an integral water drip feature which prevents the passage of water across the cavity. To reduce the risk of injury, Ancon AHD-C wall ties feature rounded safety ends.



Duty Rating

AS 2699.1:2020 and AS 3700:2018 group wall ties into performance bands known as the duty rating. The duty rating is determined by the mean values a wall tie achieves when tested to AS 2699.1:2020.

Duty Rating	Mean Strength (kN)	
	Tension	Compression
Light Duty	0.30	0.36
Medium Duty	0.60	0.72
Heavy Duty	1.50	1.80

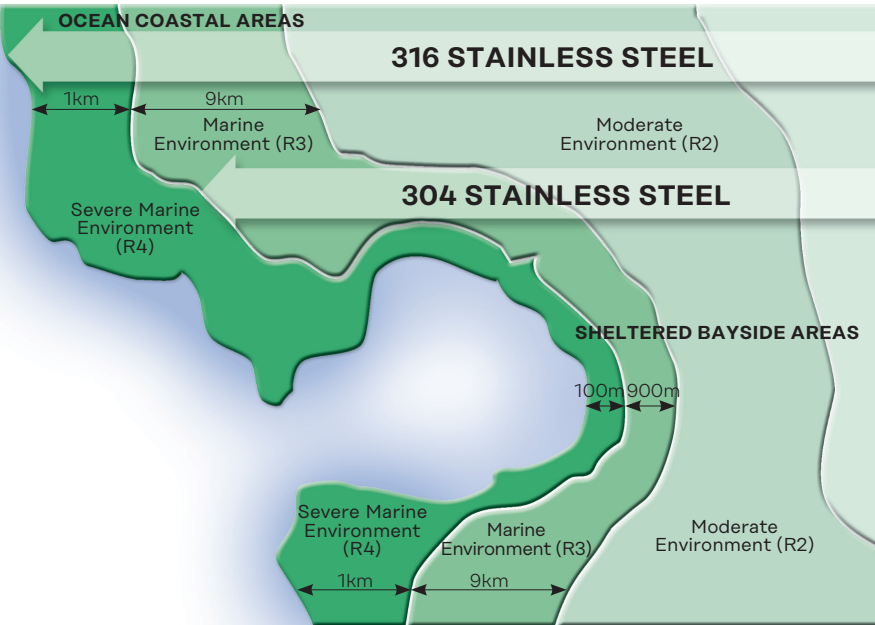
The AHD-C 200 wall tie has been tested in accordance with AS 2699 1:2020 and exceeds the requirements of the Heavy Duty rating.

Durability Rating

Material selection is based on the distance of the structure from the coast and whether that coast opens to a sheltered bay or breaking surf. AS 2699.1:2020 and AS 3700:2018 categorise these areas into zones R1 to R4.

Grade 304 stainless steel ties are suitable for durability exposure classification R1, R2 and R3. Grade 316 ties are suitable for R1, R2, R3 and R4.

Ancon AHD-C 200 wall ties are available in both grade 304 and 316 stainless steel.



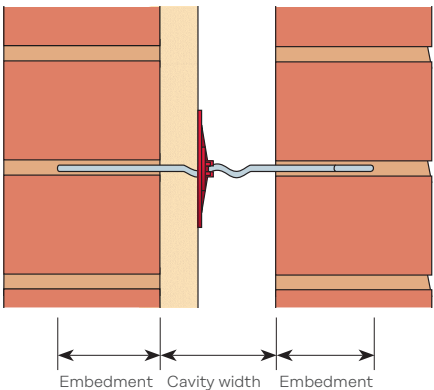
Ancon AHD-C 200 Cavity Wall Tie

Length of Tie & Embedment

Wall ties should be of the correct length to ensure they are properly embedded in the masonry.

Australian standards require a minimum wall tie embedment of 50mm however Leviat recommends tie lengths which achieve a design embedment of between 62mm and 75mm in each leaf to allow for site tolerance in both cavity width and centring of the ties.

Cavity Width (mm)	Length of Wall Tie (mm)
50 - 75	200



Spacing of Ties

Maximum spacing of AHD-C 200 ties for class 1 and 10a buildings

For NCC Class 1 and 10a buildings (typically standalone single dwellings of a domestic or residential nature) both the NCC and AS 4773.1:2015 give guidance on maximum wall tie spacings based upon wind categories determined from AS 4055:2021.

Wind category	NCC 2022	AS 4773.1:2015
N1	600 x 600	600 x 600
N2	600 x 600	600 x 600
N3	600 x 600	600 x 600
N4	-	600 x 600
N5	-	600 x 600
N6	-	600 x 600
C1	-	600 x 600
C2	-	600 x 600
C3	-	600 x 600
C4	-	600 x 600

Maximum design wind loads for AHD-C 200 ties

For all other building classes the maximum wall tie spacing is determined by calculation in accordance with AS 3700:2018 using wind loads determined from AS/NZS 1170.2:2021. In no case must they exceed a spacing of 600 x 600mm.

Tie spacing (mm)	600 x 600	600 x 430	450 x 430
Wind Suction	3.69 kN/m ²	5.16 kN/m ²	6.87 kN/m ²
Wind Pressure	4.16 kN/m ²	5.81 kN/m ²	7.74 kN/m ²

Wall ties must be located within 300mm of openings, ends and tops of walls, control joints, at horizontal or vertical lateral supports e.g. intersecting walls, and above a damp-proof course. Where the wall passes an intermediate floor, wall ties are required within 300mm above and 400mm below the floor. At intersecting walls or vertical lateral supports, wall ties must be doubled up.

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Installation Guidance

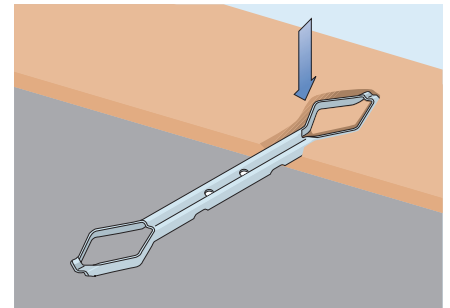
Wall ties are important to the stability of masonry and failure to install them correctly may lead to damp penetration, cracking or even the collapse of walls.

Wall ties should be pressed down in fresh mortar and not simply positioned directly onto masonry with mortar placed around them. They should be installed as the inner leaf is constructed and not simply pushed into a joint.

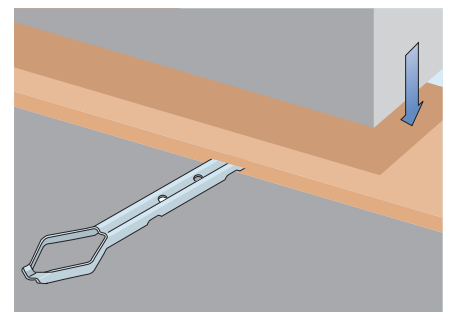
Ideally, ties should be installed with a slight fall to the outer leaf, not towards the inner leaf. The drip part of the tie should be positioned near the centre of the open cavity and should be clear of mortar droppings to allow the drip to function and prevent water from crossing to the inner leaf of masonry.

To reduce the risk of injury, Ancon AHD-C wall ties feature rounded safety ends, however, we recommend both leaves of a cavity wall are built simultaneously to eliminate any risk of injury from protruding ties. There is a risk of injury if wall ties are left protruding from a single wall leaf before the second leaf is constructed. Site managers should make all workers and visitors aware of this risk.

For more information, please contact the Leviat Masonry Technical Team at masonry.au@leviat.com or call us on **02 8840 1640**.



Wall ties should be pressed down in, and then surrounded by, fresh mortar.



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