Technical Data Sheet ACS APEX Channel

To be used in conjunction with the ACS 4600 Range Ties



Technical Data

The ACS Apex Channel Tie System is designed to provide positive and negative axial restraint to applied windloads or shear restraint when used at columns for example. The system allows a masonry wall to be tied to concrete substrate without the need for site drilling and post fixing. The Apex Channel can be supplied in 100mm or 3000mm standard lengths complete with nail holes in the back of the channel to allow it to be easily fixed to the shuttering prior to concrete pouring. The channel is filled with a polystyrene infill which acts to prevent concrete ingress. 4600 Range Channel Ties can be supplied with a debondable plain end and debonding sleeve for use at a movement joint, or a safety end with or without a drip feature as required to suit the specific application.



Test Results

The Apex Channel was cast into C30/35 concrete and tested in conjunction with the ACS 4600 Range Channel Tie at Ceram Research Limited to establish the Declared Load Capacity in tension, compression and shear.

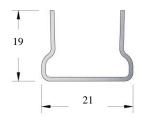
The design resistance of ties conforming to BS EN 845-1 should be taken as the declared load capacity, relevant for the type of mortar and masonry units, divided by the value of γ_M for use with ancillary components given in NA to BS EN 1996-1-1:2005, Table NA.1 which is a value of 3.5 for sites in the UK.

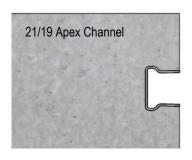
Mode of Test	Tie Feature	Maximum Declared Value (N)	Mortar Class
Shear	Channel Tie End	2340	M2 (iv)
Tension		5460	
Compression		2680	
Shear	Embedment End	2500	
Tension		4314	
Compression		2680	

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Installation

Apex channel is a high performance, self-anchoring, cast in channel designed to provide a horizontal or vertical slot in a concrete slab to accept 4600 Range Channel Ties. Apex channel is typically used to restrain brickwork, stonework or other masonry structures and can be used in applications where there is reduced cover to reinforcement. Channel is installed by nailing the channel onto the form work prior to concrete pouring. Ties are installed by twisting the tie into the channel aperture to engage the profiled end into the corresponding channel profile.







4600 Range Tie - Product Code: _/_/21

For further information or technical assistance please contact the ACS Technical Department on 0870 850 0860 or email technical@acsstainless.co.uk

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