ACS

Technical Data Sheet

Stone Restraints



Stone Restraints

Check for updates

Product summary

ACS Stone Restraints are designed to provide lateral restraint against positive and negative windloads as well as any possible imposed loads that may be subjected to a stone façade in normal service. Stone restraints are typically designed complete with a one-way or two-way welded or loose dowel that should be embedded no less than 25mm into the stone. As standard, ACS stone restraints are supplied with 6mm diameter dowels, however alternative sizes can be supplied upon request.

Following guidance from BS8298-2, restraint fixings should be located at 1/5 points for stack bonded stones and 1/4 points for stretcher bonded stones. If this is not possible the fixing should be located at least 75mm from the edge of the stone.

The number of restraints per stone should be limited to a maximum of four fixing points. These can be located in either the horizontal or vertical joints.

ACS can provide stone restraints to suit a large number of scenarios, based upon factors including cavity, required water resistance, and the substrate into which the restraint tie is being fixed.

If required, ACS can provide fixings to work alongside the stone restraint for a variety of applications. For substrates such as blockwork, it is recommended that site testing is completed to validate capacities. Care and attention must be taken around spacing of fixings and proximity to substrate edges. For more details please contact ACS.

Substrate or structure	Recommended fixing
Concrete	6.3mm Stainless Concrete Screw
	M6 Expansion Anchor
Steel	M5.5 SS Self Drilling Tek Screw
Block	6.3mm Stainless Concrete Screw
Timber	M6 Stainless Coach Screw
	M6 Stainless Wood Screw

Stone Restraints

Check for updates

Product highlights

BS 8298: 2020 compliant
Grade 304 or 316
Bespoke design to suit application
1 or 3 hole ends
Variety of dowel options available
Holed or slotted upstand

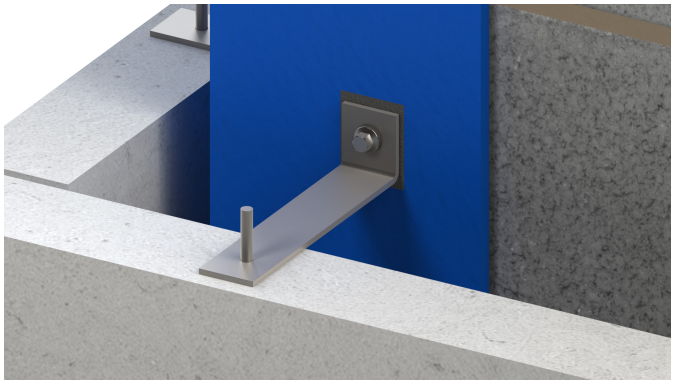


Stone Restraints

Check for updates

Restraint types

ACS can provide a number of restraint solutions based on the requirement for site tolerances. The main variants are shown opposite.



C-P-HU

The first variant provides a single hole into the stone for a simple fixing method, however affords a minimal amount of site tolerance.



M-P-HU

If a larger amount of site tolerance is required, restraint can be supplied with a multi hole end. This affords a higher range of lengths if site conditions are not as expected.

Both options of either a single hole or multi hole end are also available with a slotted upstand to allow for a vertical site tolerance. Due to the potential greater distance to the fixing, this tends to result in a larger section size of tie being required. For a slotted end please reference either C-P-SU for a single hole end, or M-P-SU for a multi hole end.

Stone Restraints

Check for updates

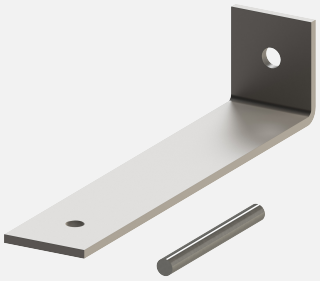
Dowel types

Dependent on the exact scenario and the installation sequence required, ACS can supply the stone restraints with a variety of dowel options. These are shown opposite.

Welded dowel



Loose dowel



Capped dowel



Published 09/26 Version 1.3

Check that you are using the most up to date version of this data sheet at: acsstainless.co.uk/downloads

0113 391 8200
info@acsstainless.co.uk

acsstainless.co.uk/products/stone-restraint

ACS Stainless Steel Fixings Ltd
ACSStainlessSteelFixings

ACS

Built on tradition. Driven by innovation.

Get in touch to learn more about how ACS can help you deliver your next project.

0113 391 8200
info@acsstainless.co.uk
acsstainless.co.uk

ACS Stainless Steel Fixings Ltd
ACSStainlessSteelFixings