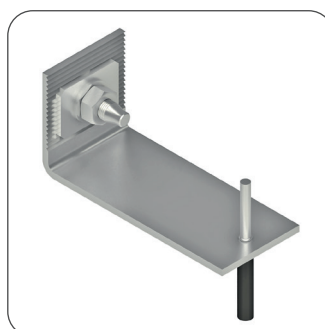
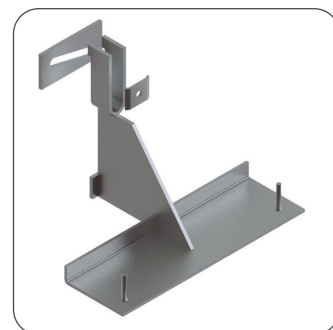


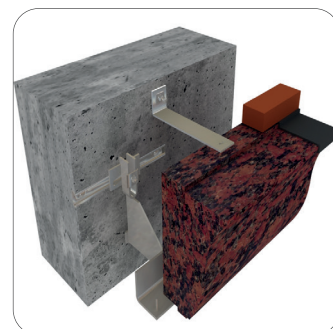
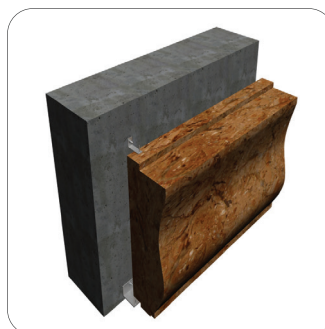
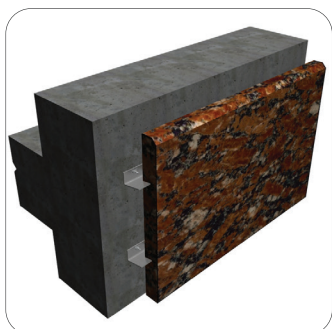


Your Fixing Systems Specialist



Corbel Support Systems

Product Technical Catalogue

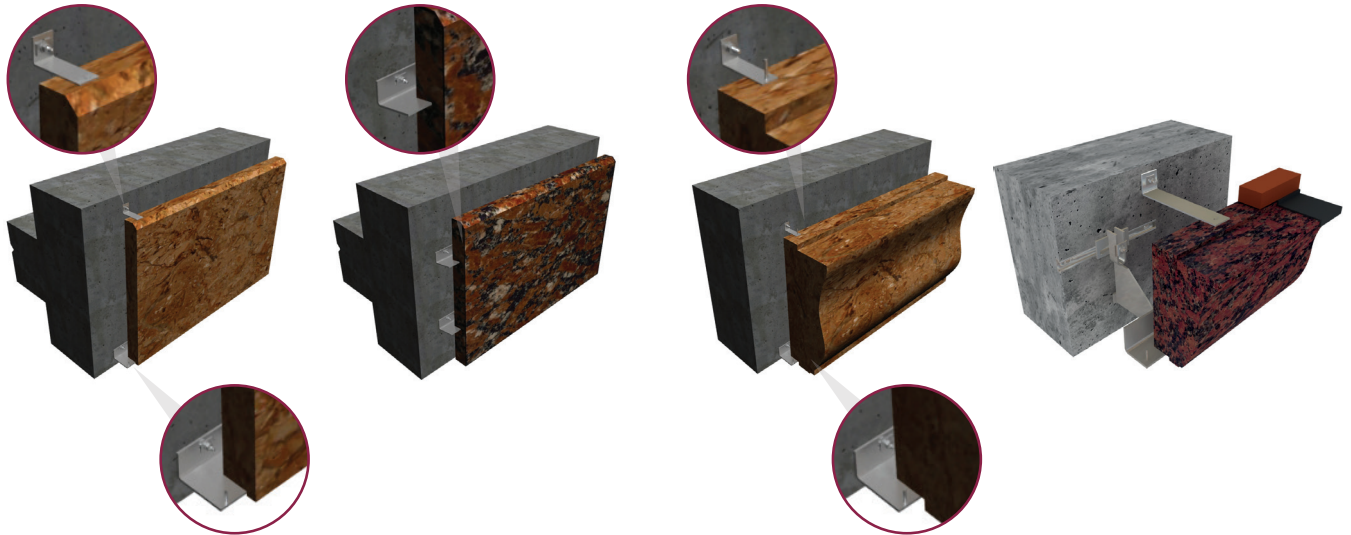


HMCS Heavy Duty Corbel Fixing Systems - Introduction

Load Bearing Anchors

Fixing systems for the installation of heavy corbel stone walls are available in a variety of types and size ranges as shown below. The actual system proposal will be made according to the technical requirements of the project. The use of these fixing systems is for high load stone cladding walls, coping and cornice stones that are made with thicker panels that can be as much as 120 mm. Load bearing and restraint anchors are used to install the slabs on to different wall backings using a variety of attachment methods like cast in channels or anchor bolts.

Application Examples



Load Bearing Support Brackets

HMS-UP



HMCS-SB/P



HMCS-DB



HAMF



Restraint Brackets

HA-RST



HA-RH



HA-RST/K B

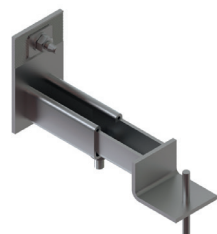


HAZ21



Periscope Brackets

HPC1



HPC2



HPC3



HPC4

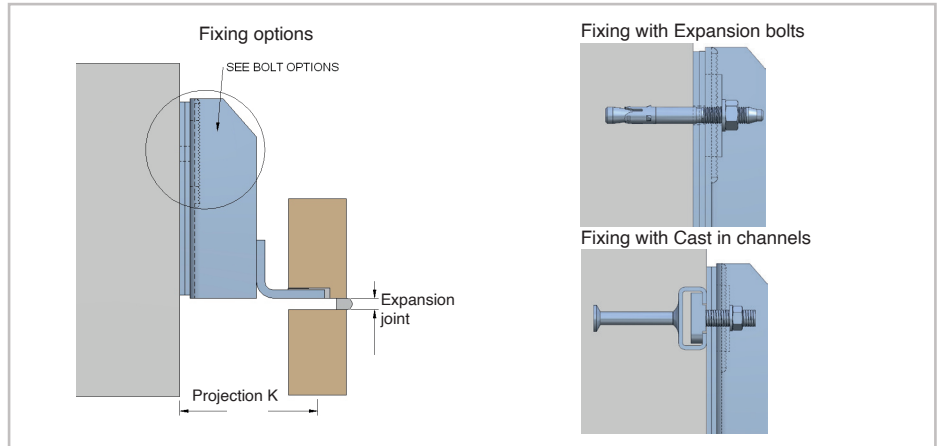


Heavy Duty Corbel Fixing Systems - Introduction

Load Bearing Anchors

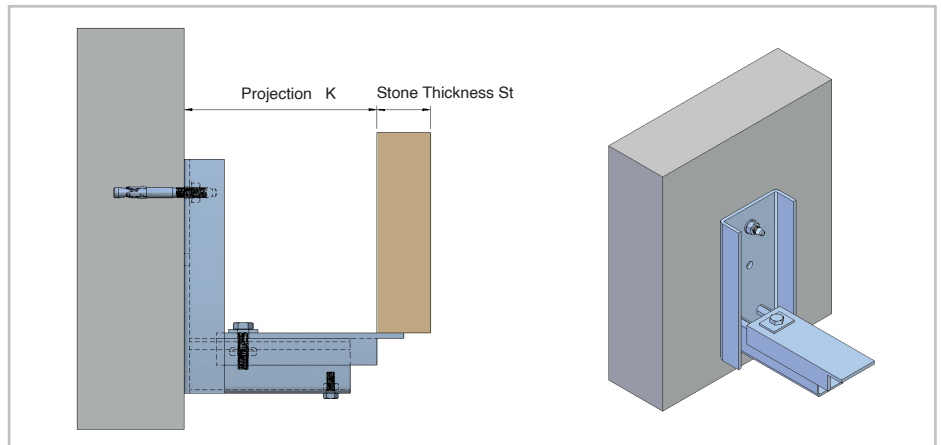
Heavy Duty brackets used for load bearing are fixed on to load bearing concrete walls. The two main methods that are usually used for attachments are either by anchor bolts or anchor channels.

Both anchor channels and anchors bolts specified according to the load requirements of the project and must be structurally verified according to the loads concerned on the project.



Heavy Duty brackets have limited adjustability to take the irregularities of the walls. An accepted method is the use of shims to adjust the projection sized by up to 10 mm.

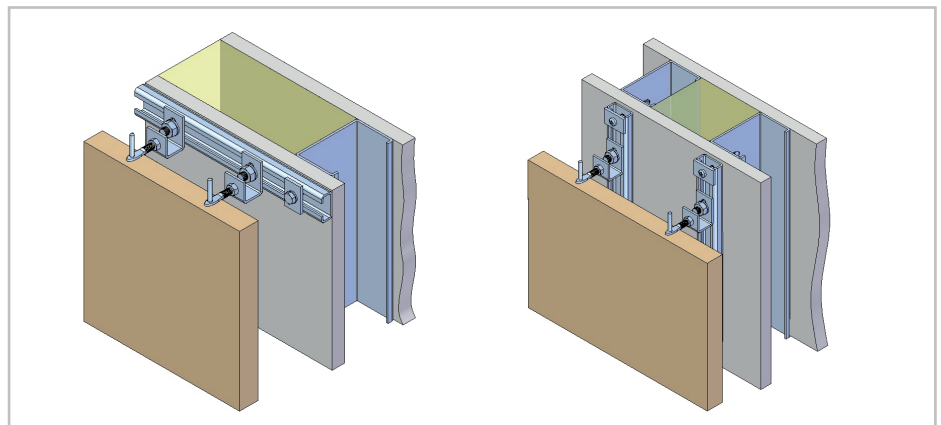
Greater adjustability can be achieved by special design as illustrated on the diagram on the right. An adjustable plate can be adapted to adjust in and out the distance of the projection size.



Restraining Brackets

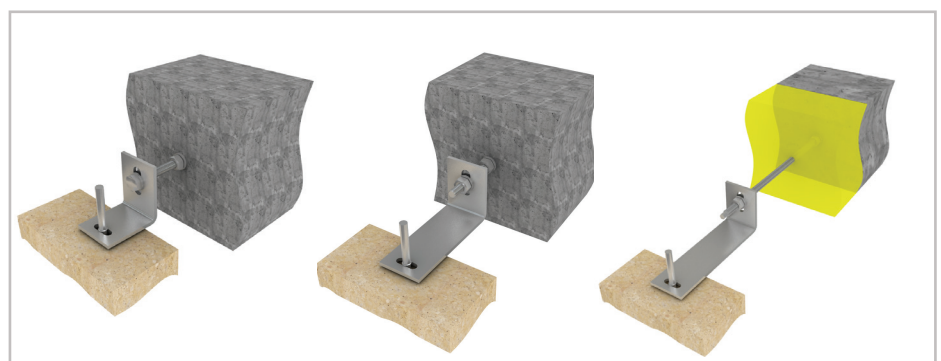
There are many systems to be used for restraining the stone slabs that are supported on a corbel system. Channel systems can be used as they are suitable to be fixed on commonly used steel sections.

Restraint anchors or wall ties can be easily fixed on to the channel at desired position which enables greater flexibility and easiness in installing the slabs.



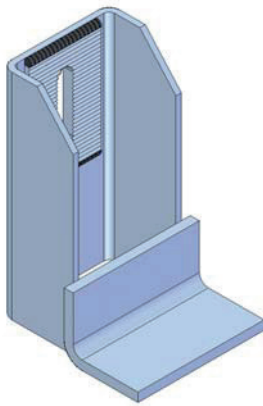
Restraint brackets are used for restraining stone slabs directly on to wall backings. There are various types of brackets that can be used for quick and easy installation.

Depending on the cavity and the existence of insulation on the wall, different type of restraint brackets are preferred for installation.

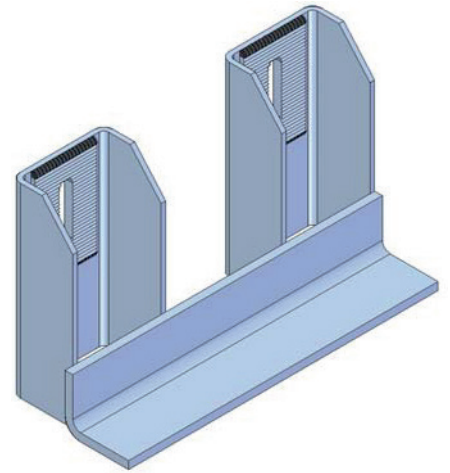


Corbel Supports - Overview

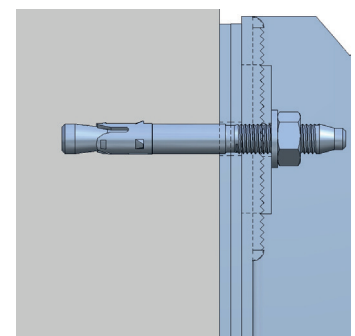
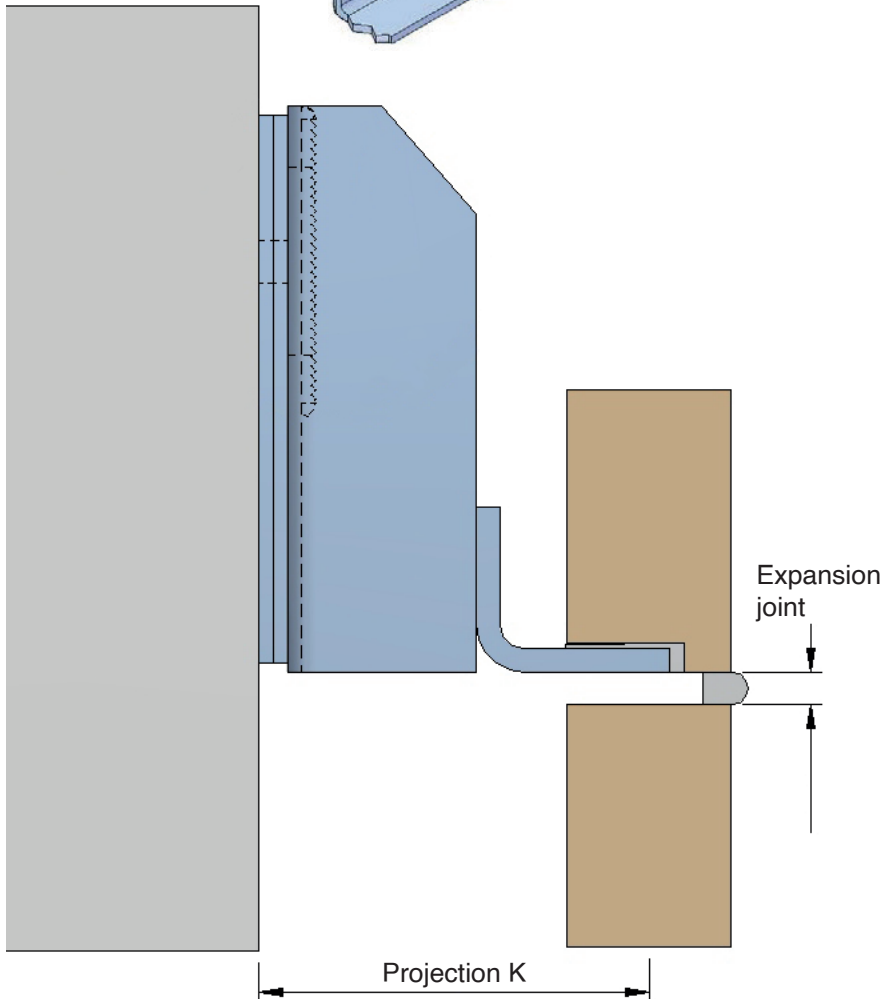
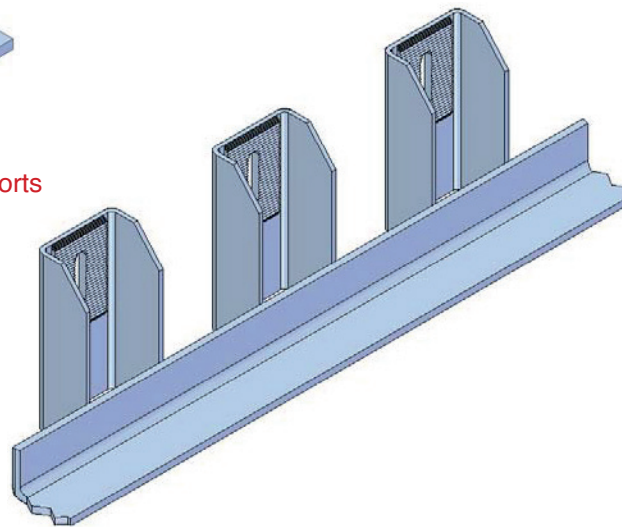
Insert Supports



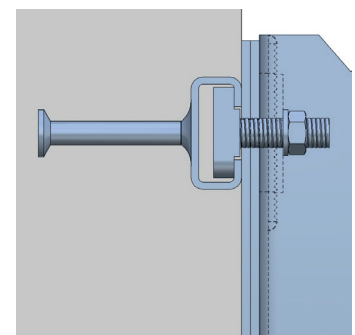
Joint Supports



Continuous Supports

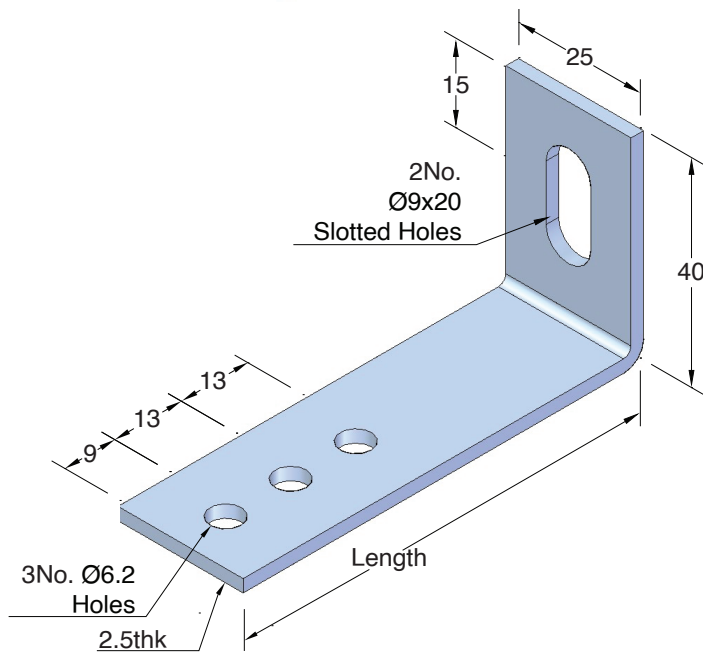
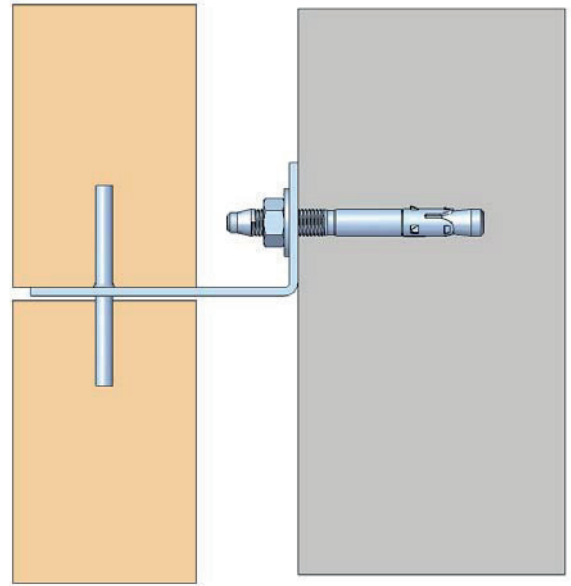
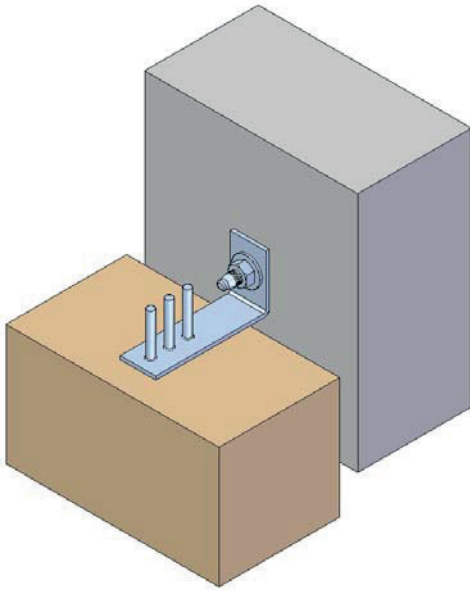


HB03 Through Bolts

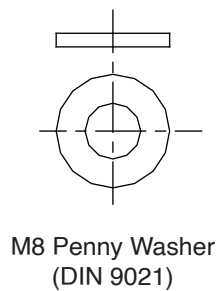
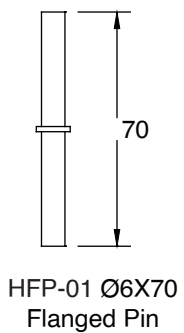


HMPR Cast in Channels

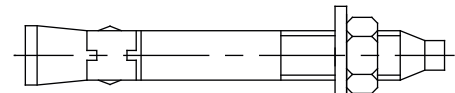
3H Restraint Cramp - Technical Details



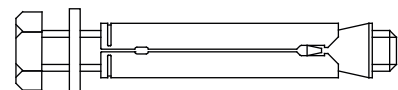
3 Hole Restraint Cramp	
Product Code	Length
3H/60	60
3H/75	75
3H/100	100
3H/125	125
3H/150	150
3H/175	175
3H/200	200
3H/225	225
3H/250	250
Other Lengths Available to Order	



BOLT OPTIONS



HB03 Through Bolt
M8x80 for Concrete

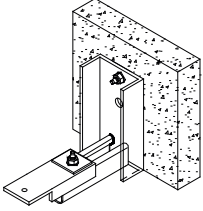


HB05 Shell Bolt
M8x80 for Concrete or Low Strength (7N/mm) Solid Block/Concrete

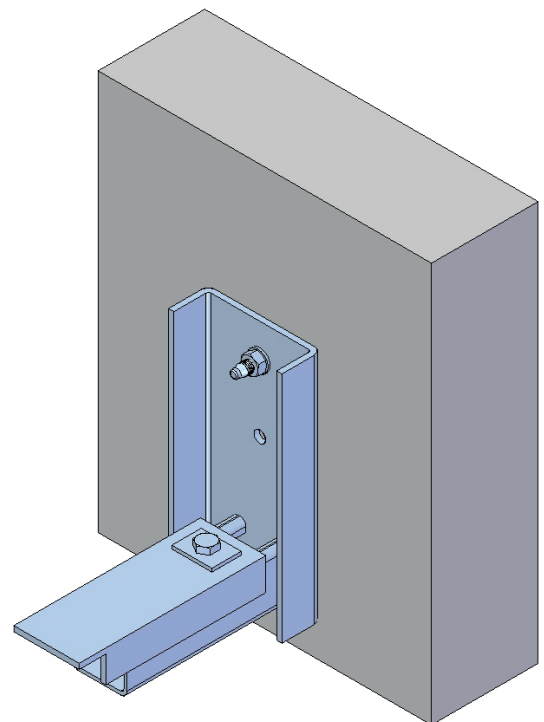
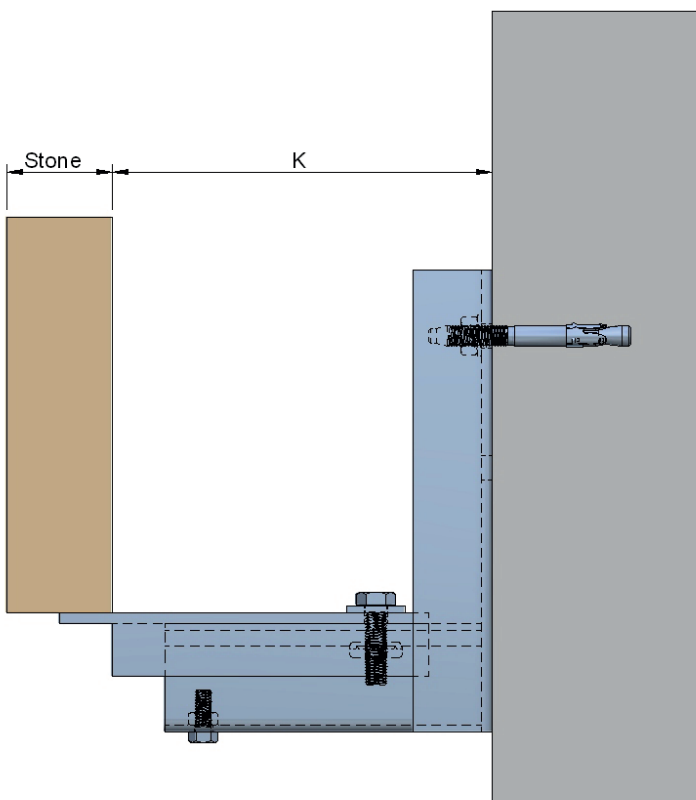
Material

Stainless Steel Type 304 (EN1.4301), A2

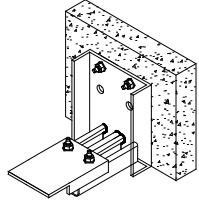
KG200 Corbel Support Anchor - Technical Details

HAZ KG200 Corbel Support Anchor				
Adjustable Support for Stone Cladding up to 50 mm Thick				
Order Code	Type	K		Anchor
		Min.	Max.	
KG200C80L	S40/C80/R83-115	103	135	
KG200C110-200S	S40/C110200/R100-148	120	168	
KG200C110-200L	S40/C110200/R149-243	169	263	

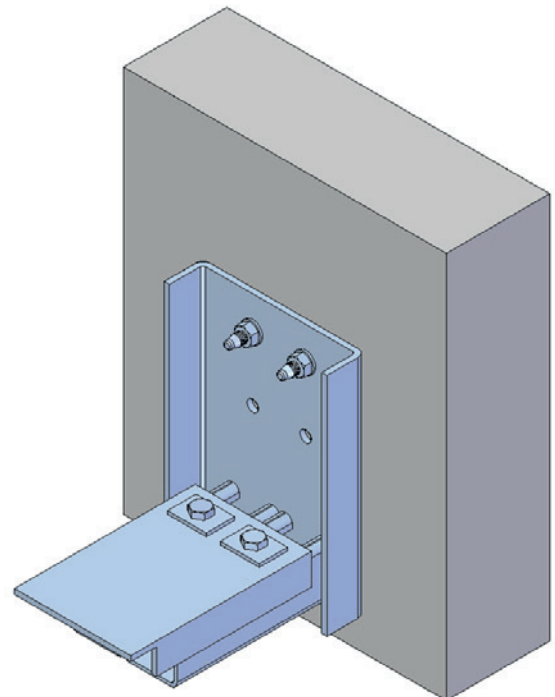
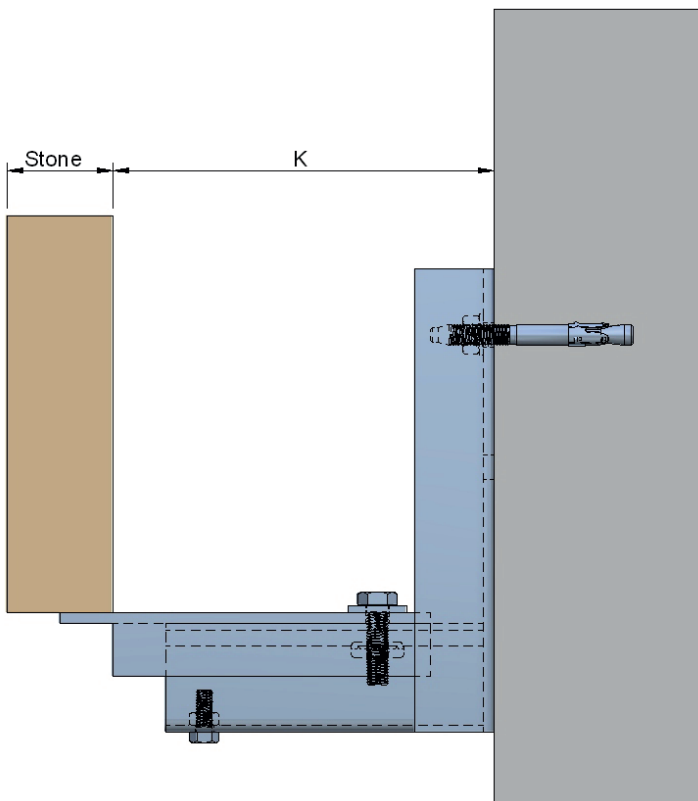
Note: (1) Alternative Bolt Position
 (2) Design Resistance Rd (Eurocode)



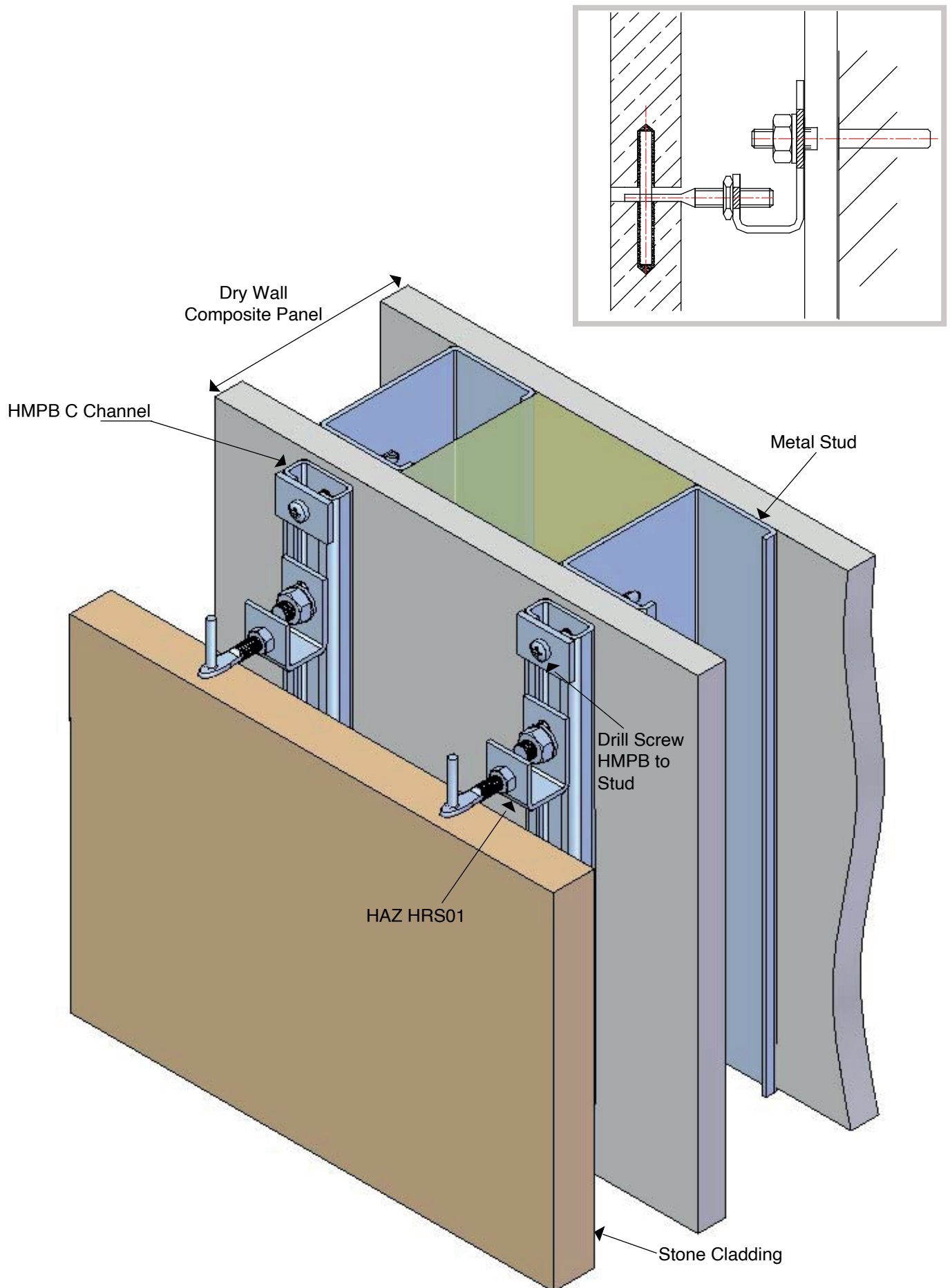
KG400 Corbel Support Anchor - Technical Details

HAZ KG400 Corbel Support Anchor				
Adjustable Support for Stone Cladding up to 50 mm Thick				
Order Code	Type	K		Anchor
		Min.	Max.	
KG400C80L	S40/C80/R83-115D	103	135	
KG400C110-200S	S40/C110200/R100-148D	120	168	
KG400C110-200L	S40/C110200/R149-243D	169	263	

Note: (1) Alternative Bolt Position
 (2) Design Resistance Rd (Eurocode)

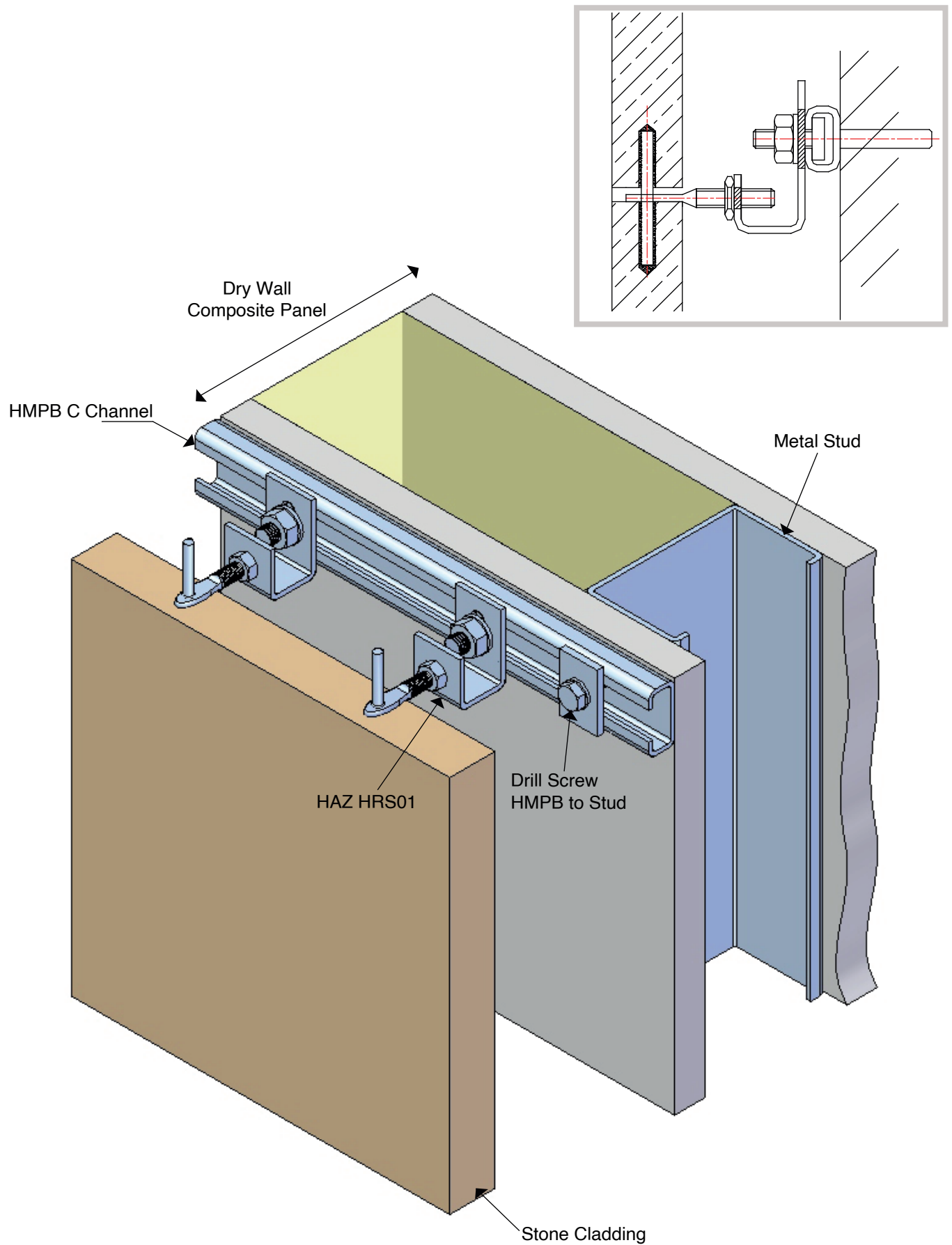


Vertical Channel Restraint - Overview



HAZ HRS01 Dry Wall Adjustable Restraint for Stone Cladding

Horizontal Channel Restraint - Overview



HAZ HRS01 Dry Wall Adjustable Restraint for Stone Cladding



Since its beginning in 1993, HAZ Metal has proved its reliability by successfully completing challenging projects. HAZ Metal has established a reputation for being a reliable supplier of structural components for facade construction.

Prestigious and large scale projects around the world have been supplied with high quality fixing systems designed and manufactured by HAZ Metal.

Always at the forefront of fixing technology, HAZ METAL has established a wide product portfolio to complement its fixing systems targeted for the specialist external wall cladding market. Designing and engineering high integrity and quality products for facade applications made HAZ a worldwide known brand in the construction industry.

HAZ METAL combines the very latest international technology with its own research and development team to establish a technical excellence within the industry. HAZ METAL readily embraces the responsibility of a major producer and shares its expertise with problem solving solutions.



HAZ Metal is certified with integrated management systems by TUV SUD for ISO 9001 & OHSAS 18001



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