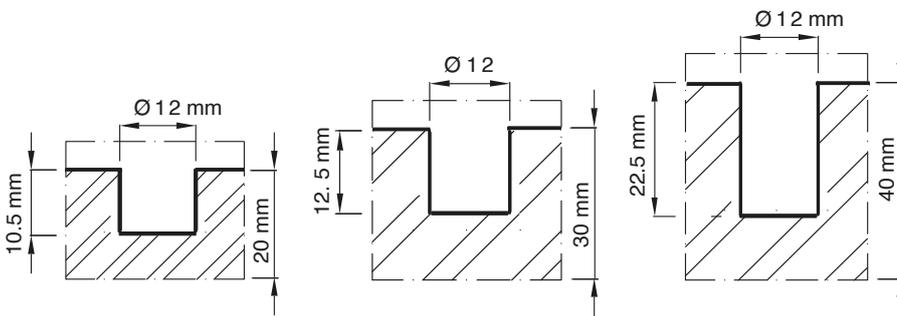
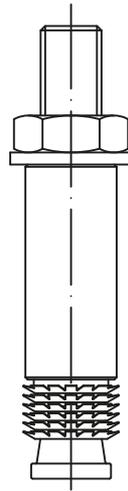
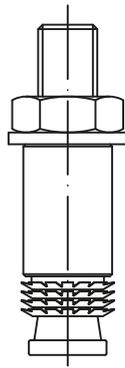
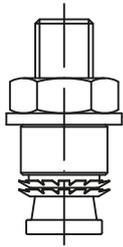


# HB09 Super Undercut Bolt - Introduction

The HB09 HAZ Super bolt was developed to meet the special requirements in stone installation where attachments from the rear surface of stone panels were required. With the use of HB09 HAZ Super bolts and suitable drilling method, this is achieved. HB09 HAZ Super bolt is suitable for stone thicknesses between 20 and 50 mm.

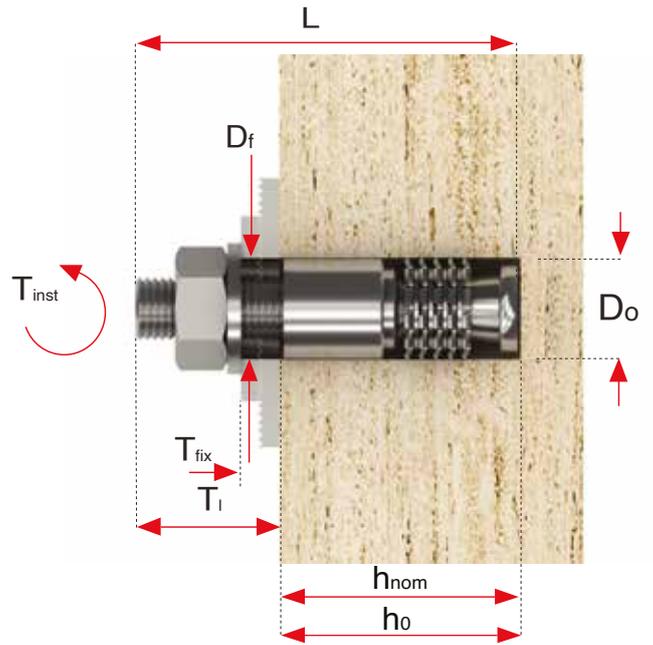


Drilling rear surface of panels using wet system machines and no core drill bits.

Zero tolerance in hole size to be achieved in order for proper and secure attachment.



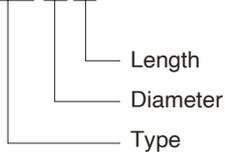
# HB09 Super Undercut Bolt - Technical Details



Product Code	Technical Details									
	Bolt Size	Stone Thickness	Drill Hole Diameter	Drill Length	Minimum Embedment	Max. Fixture Thickness	Fixture Hole Diameter	Maximum Torque	Bolt Length	Thread Length
	(mm)	St (mm)	do (mm)	ho (mm)	hnom (mm)	T <sub>fix</sub> (mm)	d <sub>i</sub> (mm)	T <sub>inst</sub> (Nm)	(mm)	(mm)
HB09-24/30	M8x30	20	12	10.5	10	5	9	13	30	20
HB09-48/45	M8x45	30	12	12.5	12	5	9	13	45	40
HB09-72/60	M8x60	40	12	22.5	22	5	9	13	60	55

## Product Code

HB09 24/30



## Application:

For fastening fixtures to natural stone

## Available in:

Stainless Steel AISI 304 & AISI 316

## Advantages of HB09 Haz Super Bolt

- No use of special and expensive drilling tools.
- No need of expensive drill bits.
- No stone breakage during fixation of bolt

## Hard Granite Based Values

Allowable Loads (kN)		
Load direction	a degree	M8
Pull out	0	1.40
Shear	90	3.00

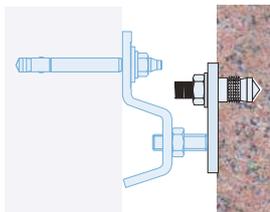
## Marble Based Values

Allowable Loads (kN)		
Load direction	a degree	M8
Pull out	0	1.00
Shear	90	2.10

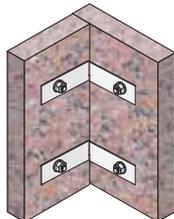
A safety factor of 2.5 is taken for mean ultimate failure loads.

## Application Examples:

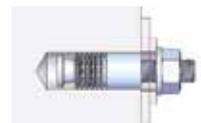
Facade Cladding



Corner Stone Fixing



Vanity Top Fixing



## Fixing Instructions



Drilling



Cleaning



Placing Bolt



Hammering Bolt



Control



Fastening