

基本資訊 Basic Information

SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)



Material:

Stainless steel grade 304/316

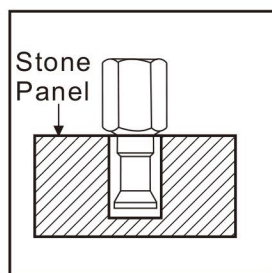
**For SS304, please order in advance

Features:

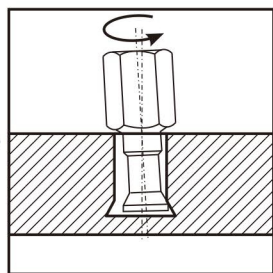
- Effective fixing used for connecting bracket system and natural stone panels from 15mm (e.g. granite, marble, limestone, mircolite etc.)
- Strengthen the central renitency of the whole anchorage system. More stable and safer design comparing with traditional method
- Applicable for Building Department, Architectural Services Department and Housing Department approved projects

安裝程序 Installation Procedure

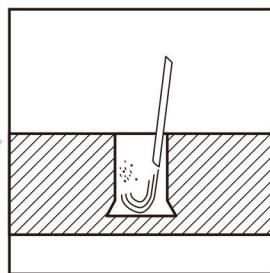
By using SUNWAY Stone Back Anchor Drilling Machine



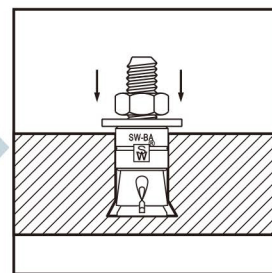
Drill the hole
(Moderately inject water while drilling)



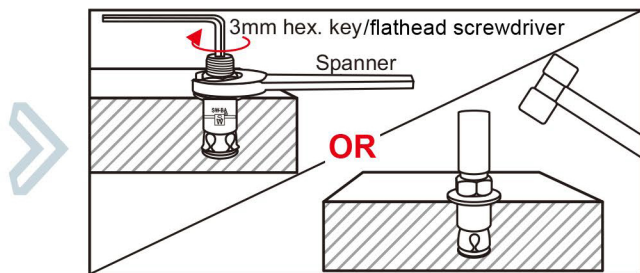
Enlarge the hole's base



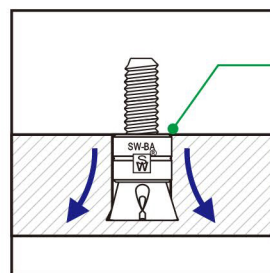
Clean the hole



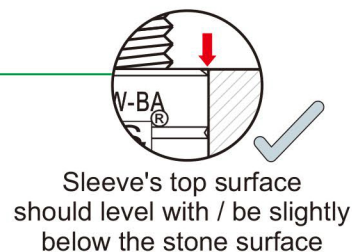
Insert SW-BA stone back anchor



Apply the installation torque **OR**
Hammer the anchor by the specific setting tool



Shell expands and
installation complete



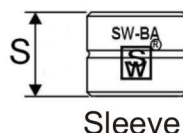
Sleeve's top surface
should level with / be slightly
below the stone surface

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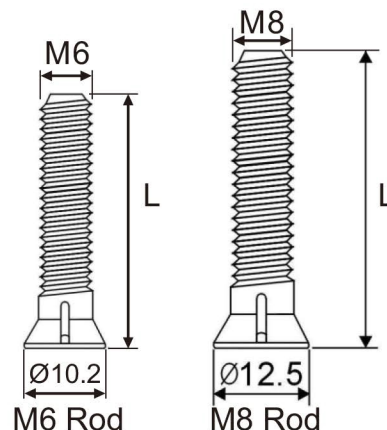
安裝資訊 Installation Data

SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)



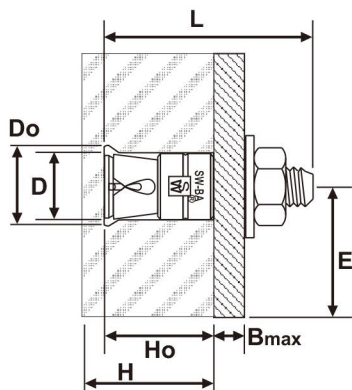
Sleeve

Material:
Stainless steel grade 304/316
**For SS304, please order in advance



M6 Rod

M8 Rod



Item	SW-BA-M6	SW-BA-M8
D Drill hole diameter	11±0.5mm	13±0.5mm
Do Under-cut diameter	12±0.5mm	15.5±0.5mm
A Minimum anchor spacing	150mm	150mm
E Minimum edge distance	50mm	50mm
T Torque for tightening nut	6Nm	10Nm

Size Selection

Model	(Ho) – Drill hole depth (mm)	(S)- Sleeve length (mm)	(L)- Total length (mm)	(Bmax)- Max. thickness of fixture (mm)
For (H) – Stone panel thickness ≥ 15mm				
SW-BA M6X30	7.5	4	30	15
For (H) – Stone panel thickness ≥ 25mm				
SW-BA M8X16/40	16	7	40	15
For (H) – Stone panel thickness ≥ 30mm				
SW-BA M8X21/40	21	12	40	10
SW-BA M8X21/55	21	12	55	25
SW-BA M8X21/70	21	12	70	40
For (H) – Stone panel thickness ≥ 40mm				
SW-BA M8X28/55	28	20	55	18
SW-BA M8X28/70	28	20	70	33

For other sizes, please contact us and order in advance.

Note:

- 1.) The sleeve of SW-BA M6 is made of ABS and 20% fiber.

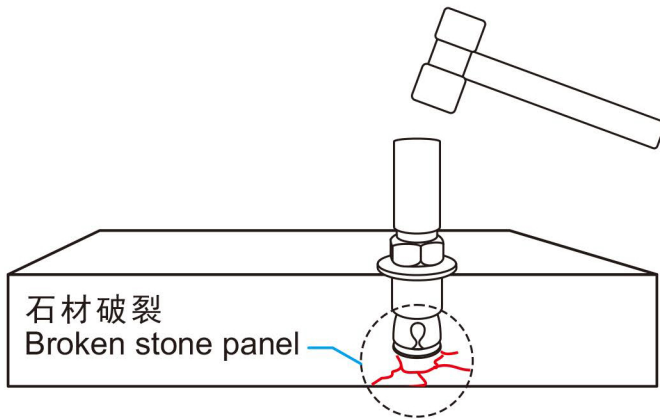
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特別設計
Special Features

SUNWAY SW-BA Stone Back Anchor
新和不鏽鋼石背螺絲 (SW-BA)

一般石背螺絲缺點

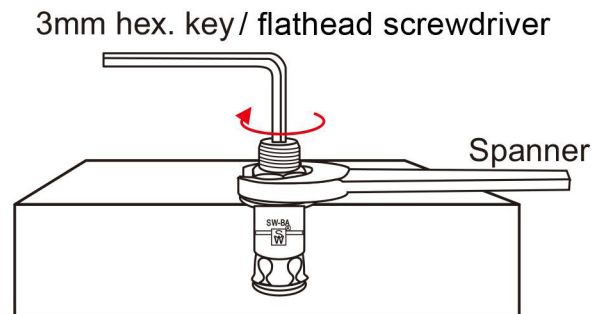
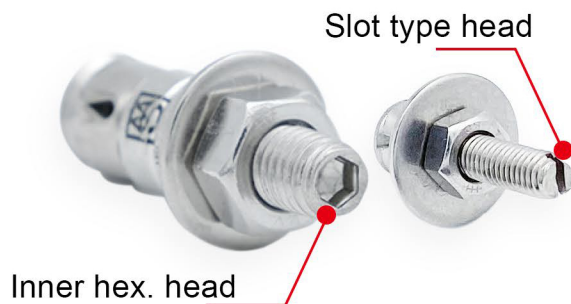
Weakness of the general stone back anchor



In general, the similar products in the market could only be installed into the stone panels by hammering. This possibly increases the risk of stone's damage.

新和石背螺絲

Sunway SW-BA Stone Back Anchor



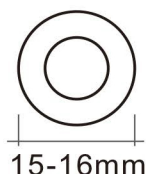
SUNWAY SW-BA stone back anchor provides one more installation method. Workmen could tighten the nut by a spanner and simultaneously fix the position of the anchor by using our special inner hex. or slot type head design with a hex. key or a flathead screwdriver. During this process, the shell of the anchor would expand gradually and the stone could be ensured its completeness.

**The default design of SW-BA M6 is slot type head, SW-BA M8 is inner hex. head.

特別設計 Special Features

SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)

General Washer

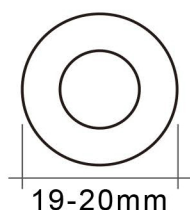


Thickness:
1.0 to 1.5mm

The washer of general stone back anchor is usually smaller and thinner.

**Only apply on M8 anchor

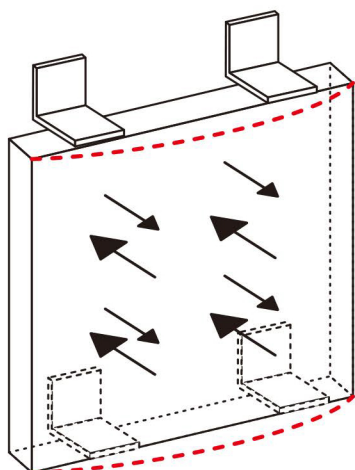
Sunway Washer



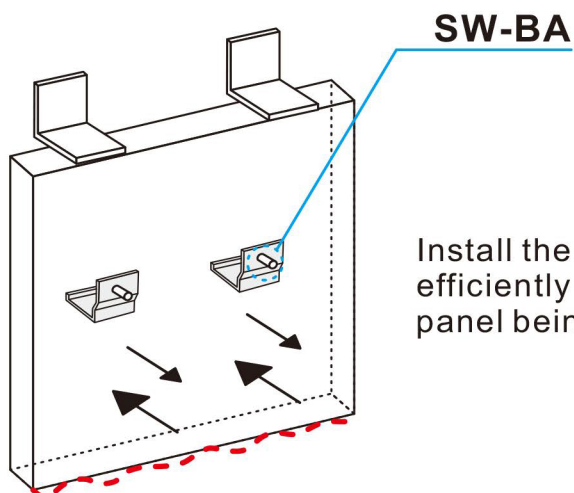
Thickness:
1.9 to 2.0mm

The washer of SW-BA stone back anchor is bigger and thicker. This provides stronger friction than the general.

**Only apply on M8 anchor



The traditional stone facade anchorage system usually install the bracket and anchor bolt on the edge of the panel. The centre of panel may bulge because of the insufficient rigidity and long-term pressure.



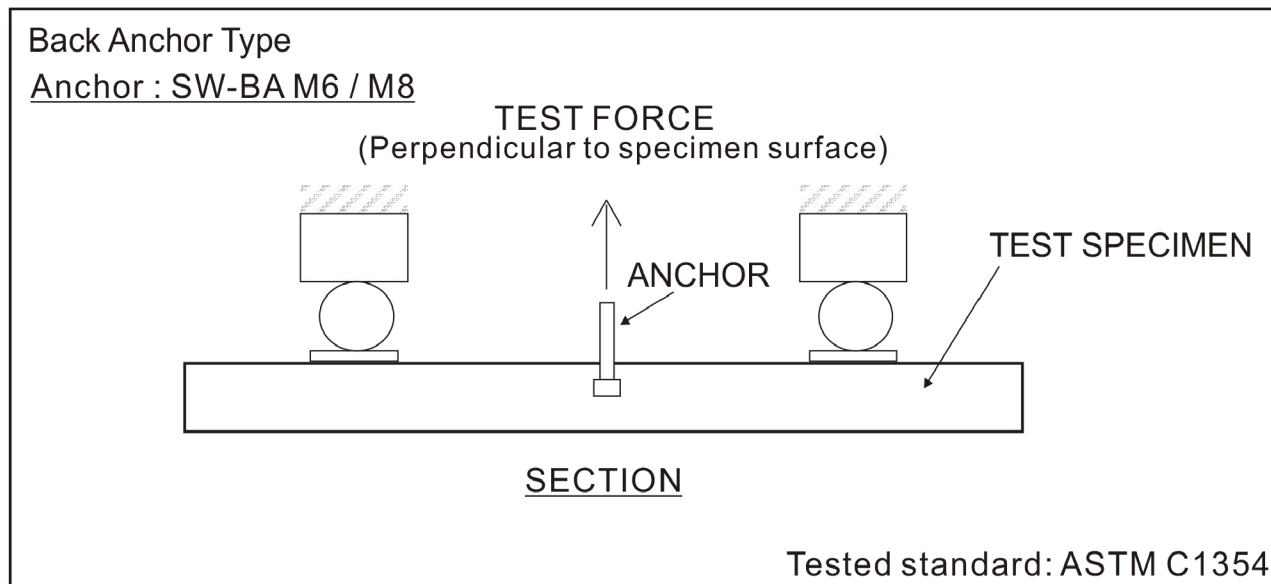
Install the stone back anchor at the back of the panel can efficiently withstand the wind pressure and keep the facade panel being stable.

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測試結果 Test Result

SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)



Anchor Model	Stone Type (each type with at least 5 specimens)	Mean Anchorages System Load, KN (In wet conditioning)
SW-BA M8	Granite St. Nicolas	8.07
	Granite White Green	8.67
	Granite China Gold	8.01
	Granite Black Granite	12.50
	Limestone Alexandra Beige	8.86
	Limestone Lovely Beige	7.36
	Granite - Nero Pepperino	15.76
	Marble - Rosa Candoglia	8.92
SW-BA M6	Microlite	7.39

Note:

- 1.) All test specimens were in wet conditioning which means they have had soaked in water tank at $22 \pm 2^\circ\text{C}$ for 48 hours.
- 2.) As stone are natural materials, different type, level or batch of stone panels may have different mechanical, physical and chemical properties. Before installation, customers should complete the required calculation and tests according to PNAP-APP-16 from building department to ensure the safety of design.

常見碼片設計 Typical Bracket System

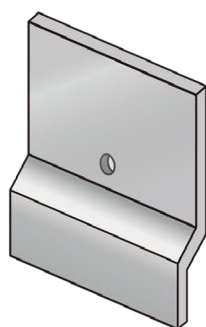
SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)

The following application samples are just for references.

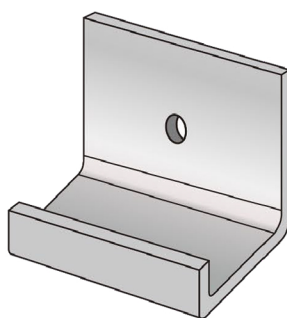
With a view to ensuring the safety, the whole bracket fixing system, including the size, material, type and quantity of bracket will be used, should be designed and undergone a precise structural calculation prepared by chartered engineers or related authorities before installation commencement.

Stone Back Bracket and J Bracket

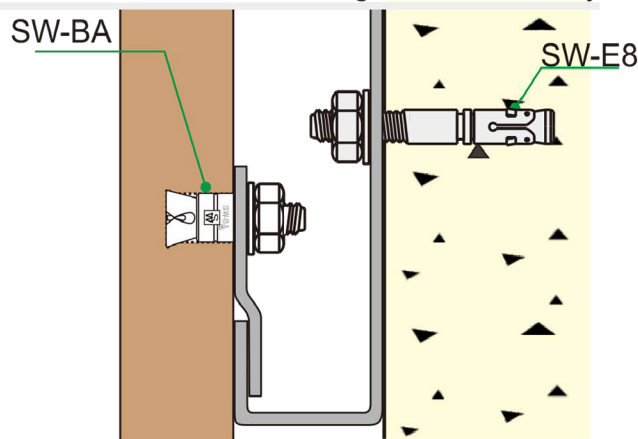
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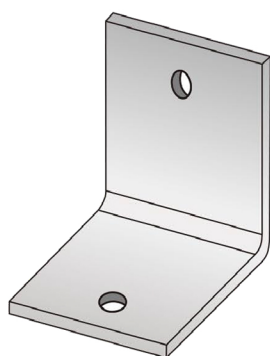
Stone Back Bracket



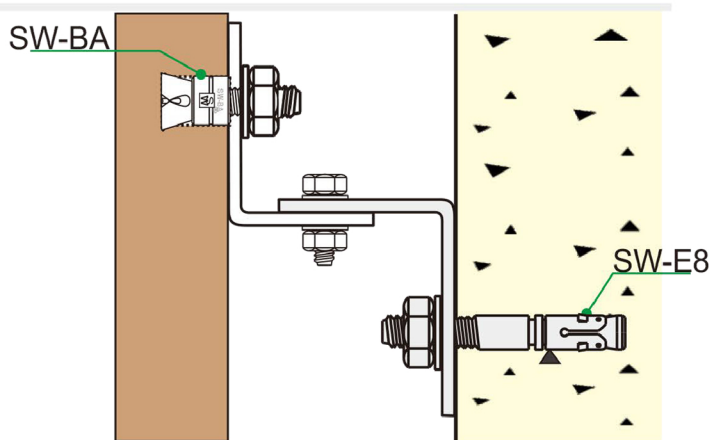
"J" Bracket



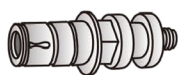
Two L Bracket(connect by bolt and nut)



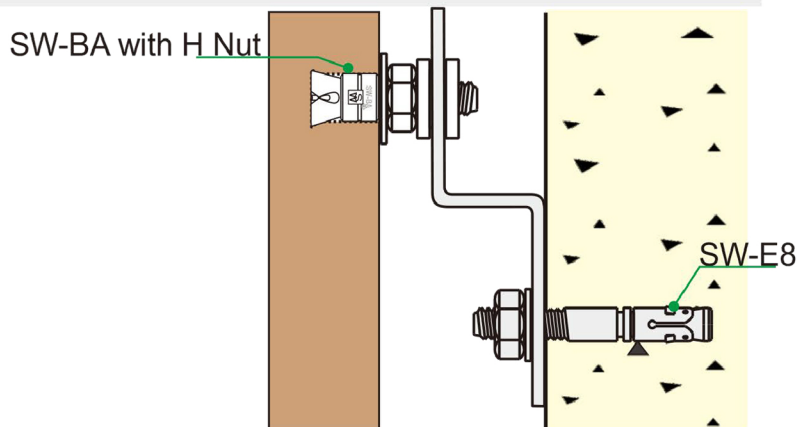
L Bracket



U hole Bracket(with SW-BAH H nut)



U Hole Bracket



(Designed by Bao Yuan Granite)

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配件 Accessories

SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)

Comprehensive Portable Stone Back Anchor Drilling Machine (SW-UDM5)



SUNWAY SW-UDM5 Comprehensive Portable Stone Back Anchor Drilling Machine is specifically designed for SUNWAY SW-BA Stone Back Anchor installation.

Applicable for drilling and enlarging holes on the backside of various natural stone panels, ranging from marble, limestone, granite, ceramic or high density cement board, with a view to collaborating with any dry installation of diverse front facade such as natural stone facade and ceramic facade.

Features:

- Drilling and enlarging holes for SW-BA stone back anchor are carried out in simple process and by only one machine
- By using the principle of vacuum-pumping, drill hole's position could be fixed during the process of drilling and enlarging
- The drill holes could be guaranteed in a precise and consistent symmetric shape
- Small Size, Portable, Easy to operate

Basic Parameter

Voltage	AC220V	No Load Speed	8500r/min
Grinder Model	Hitachi G15SA2	Power Input	1200W
Machine Size(approx.)	58 x 30 x 50cm	Machine Weight(approx.)	16KG
Min. Water Pressure	0.3MPa	Min. Working Air Pressure	0.6MPa
Max. Drill Hole Depth	based on the drilling bit	Drill Hole Diameter	based on the drilling bit

配件 Accessories

SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)

Stone Back Anchor Drilling Bit(For SUNWAY drilling machine)



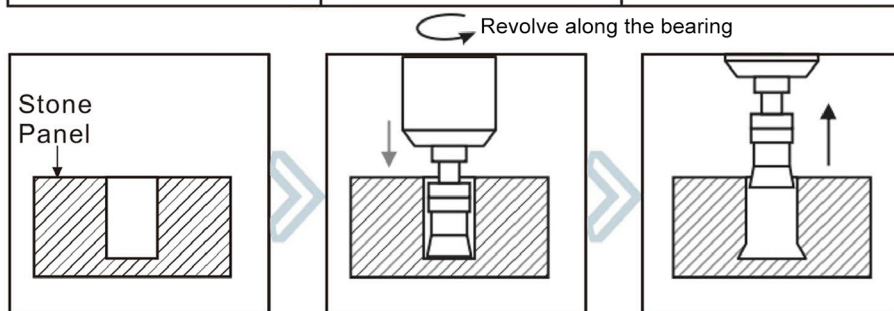
Model	Suitable Size	Maximum Drill Hole Depth
SW-BADB M6	SW-BA M6	15mm
SW-BADB M8S	SW-BA M8	21mm
SW-BADB M8L	SW-BA M8	28mm

For other sizes, please contact us and order in advance.

Stone Back Anchor Drilling Bit(For rotary hammer drill)



Model	Suitable Size	Maximum Drill Hole Depth
SW-BAHDB M8	SW-BA M8	28mm

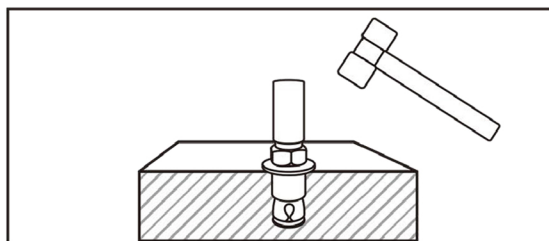


(Moderately inject water while drilling)

Stone Back Anchor Setting Tool

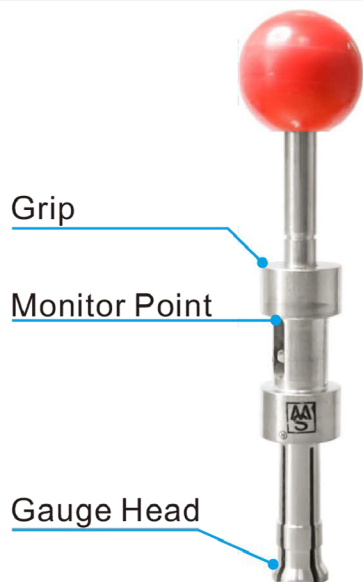


Model	Suitable Size	Maximum Anchor Length
SW-BAST M6	SW-BA M6	30mm
SW-BAST M8S	SW-BA M8	55mm
SW-BAST M8L	SW-BA M8	70mm



配件 Accessories

SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)

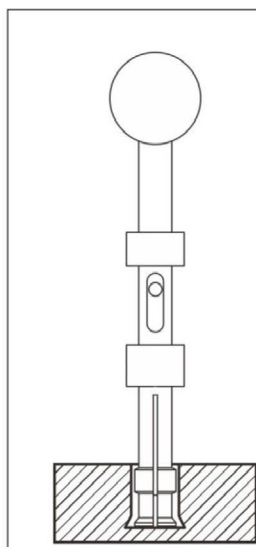


An useful tool for checking the stone back drill holes
Features:

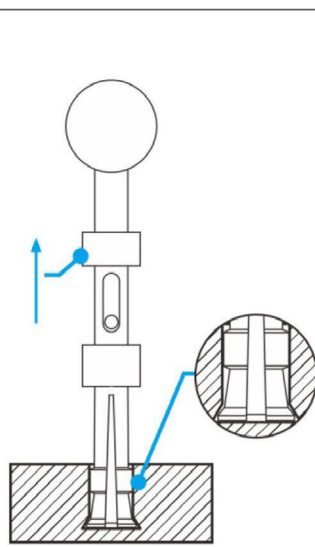
All the dimensions of stone back drill hole are correct if the monitor point could be pushed to the bottom and trigger a clear click sound. If not, workmen should stop inserting SW-BA stone back anchor into the stone panels until the holes have been correctly shaped by specific tools

Model	Suitable Size	Maximum Drill Hole Depth
SW-BAIG M6	SW-BA M6	15mm
SW-BAIG M8	SW-BA M8	28mm

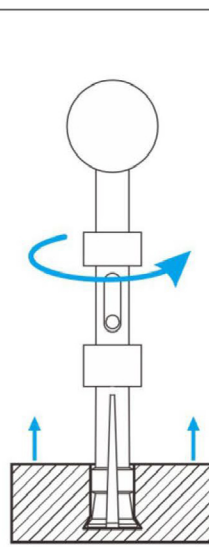
Step 1:



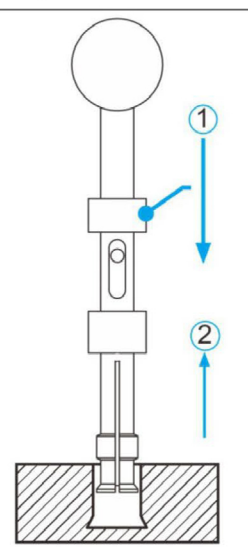
Step 2:



Step 3:



Step 4:



1. Insert the gauge into the drill hole until the head touched the bottom.
2. Pull up the grip of the gauge. If the drill hole is proper, the monitor point would attain the bottom and trigger a click sound which represent the gauge head has already fully expanded.
3. At this moment, internal gauge has clasped the drill hole, user could try to lift the stone panels by the gauge.
4. Push down the grip of the gauge, the expanded head will draw back. The gauge could easily be pull out from the hole.

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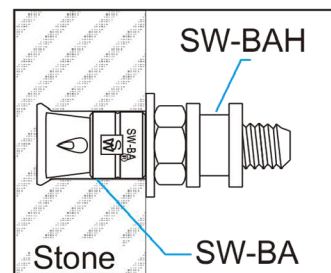
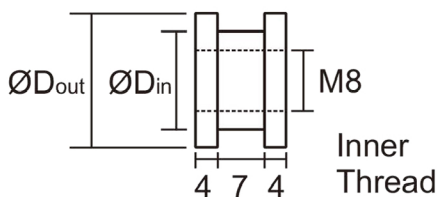
配件 Accessories

SUNWAY SW-BA Stone Back Anchor 新和不鏽鋼石背螺絲 (SW-BA)

SW-BAH(H Nut)



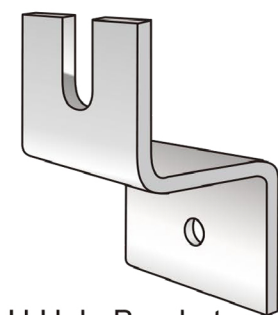
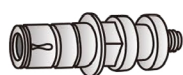
Material:
Stainless steel grade 304/316



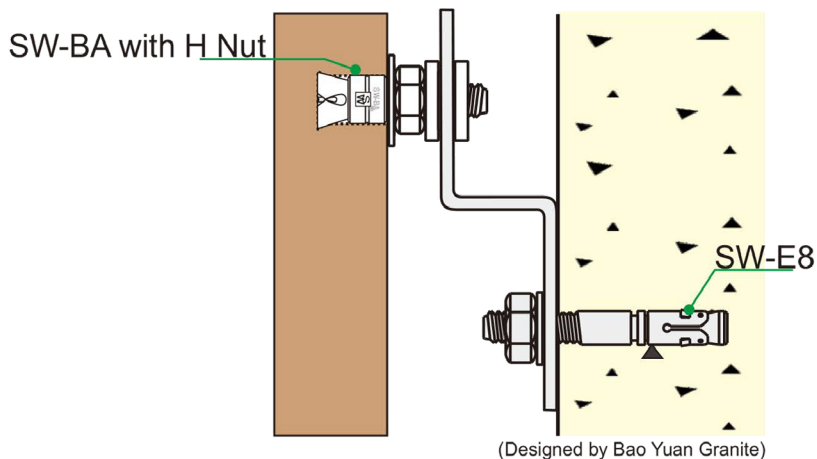
Model	D _{out} Outer Diameter(mm)	D _{in} Inner Diameter(mm)
SW-BAH M8 X 17/11	17	11
SW-BAH M8 X 21/11	21	11

For other sizes, please contact us and order in advance.

Application



U Hole Bracket



(Designed by Bao Yuan Granite)

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