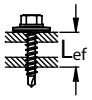
BI-METAL SELF DRILLING SCREW

SELF DRILLING SCREW FOR FASTENING OF CLADDING TO STEEL

- Good corrosion resistance (stainless steel A2)
- #3 drill point for one step installation with no need for predrilling
- Tall head for easy and stable mounting
- Supplied with washer with bonded EPDM for better load distribution and sealing abilities
- Available in more than 500 colours (QUALICOAT certified powder)



Effective length


Hex head

Corrosion category C4

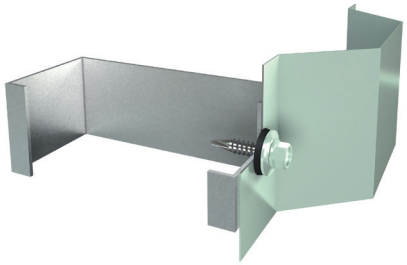
Bi-metal stainless A2

PRODUCT RANGE

MG/PG	Item no.	Item name	Washer [mm]	Thread [mm]	Length L [mm]	Effective length L_{ef} [mm]	Drill capacity [mm]	Head [mm]	Unit [pcs]
06 2532	18358	HWH RXB 5.5 X 26 #3 "RXB" HX8	-	Ø5.5	26	11.0	1.5 - 6.0	Ø10.0 HEX 8.0	250
	18399	HWH RXB 5.5 X 26 #3 "RXB" HX8 RX-16B	A2 Ø16			7.5			
	18359	HWH RXB 5.5 X 38 #3 "RXB" HX8	-		38	23.0			200
	18401	HWH RXB 5.5 X 38 #3 "RXB" HX8 RX-16B	A2 Ø16			19.5			

TYPICAL APPLICATION

- Fastening of cladding to steel

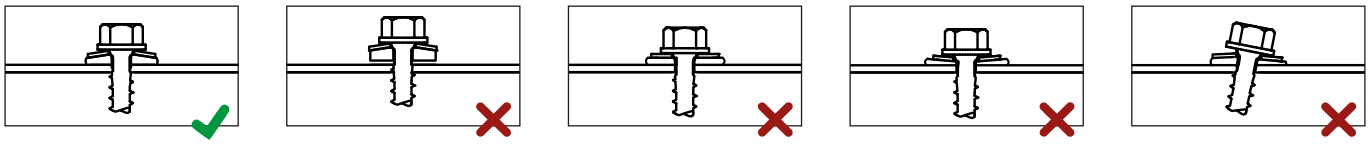


ASTON SWEDEN AB
Hangarvägen 23
SE-691 35 Karlskoga
Sweden
Tel.: +46 586 216 600
info@astonsweden.com
www.astonsweden.com

INSTALLATION INSTRUCTIONS

For optimal performance it is important to follow the installation instructions. An incorrect installation may lead to decreased sealing abilities and/or load bearing capacity.

It is recommended that the rotational speed is 1600 - 2200 RPM.



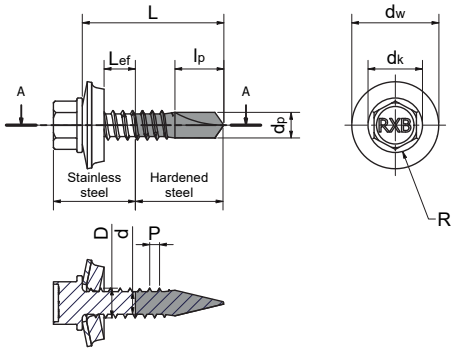
Correct | Not tightened enough | Overtightened | Very overtightened | Tilted angle

GOOD TO KNOW

Bi-metal screws consist of a stainless steel body and a hardened carbon steel point. This combines the excellent corrosion resistance from the stainless steel and the superior drilling and tapping capabilities of the carbon steel. However, it is important to be aware that the carbon tip has a lower corrosion resistance than the stainless steel body. Consequently, it is important to choose the correct effective length and to consider if a possible corroding carbon tip can have any undesired cosmetical effects.

TECHNICAL DATA

Outer diameter, D	[mm]	Ø5.5
Inner diameter, d	[mm]	Ø4.1
Head diameter, d_k	[mm]	Ø10.0
Washer diameter, d_w	[mm]	Ø16.0
Drill point diameter, d_p	[mm]	Ø4.7
Drill point length, l_p	[mm]	9.0
Pitch, P	[mm]	1.8
Drive type, R	[-]	HEX 8.0



ASTON SWEDEN AB
Hangarvägen 23
SE-691 35 Karlskoga
Sweden
Tel.: +46 586 216 600
info@astonsweden.com
www.astonsweden.com

DESIGN RESISTANCE

The design resistance of the screw is determined in accordance with EN 1993-1-3:2006 + AC:2009, Eurocode 3 for steel structures.

The resistance when loaded in tension, N_{Rd}, appears from the table on the right and is the minimum value of the pull-out resistance of the supporting object, the pull-through resistance of the fixed object, and the tension resistance of the screw.

The resistance when loaded in shear, V_{Rd}, appears from the table on the right and is the minimum value of the bearing resistance of the supporting object and the fixed object, and the shear resistance of the screw.

The theoretical values must be considered indicative since the conditions at the construction site may vary. Practical tests of the specific application are recommended for verification of the listed values.

Assumptions:

Fixed object: Steel S280GD - EN 10346

Supporting object: Steel S280GD - EN 10346

t_I = Thickness of the fixed object [mm]
t_{II} = Thickness of the supporting object [mm]

All resistances are stated in kN (1 kN ≈ 100 kg)
Safety factor: γ_M = 1.35

MG/PG: 06 2532 HWH RXB 5.5 X L #3 RXB HX8 RX-16B

Design resistance when loaded in tension, N_{Rd} [kN]

t_I \ t_{II}	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00
0.50	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
0.55	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
0.63	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
0.75	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.88	0.97	1.17	1.17	1.17	1.17	1.17	1.17	1.17
1.00	0.97	1.33	1.33	1.33	1.33	1.33	1.33	1.33
1.25	0.97	1.67	1.67	1.67	1.67	1.67	1.67	1.67
1.50	0.97	1.86	2.00	2.00	2.00	2.00	2.00	2.00

Design resistance when loaded in shear, V_{Rd} [kN]

t_I \ t_{II}	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00
0.50	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
0.55	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
0.63	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
0.75	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28
0.88	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63
1.00	2.32	2.66	3.01	3.01	3.01	3.01	3.01	3.01
1.25	2.90	3.16	3.43	3.69	3.76	3.76	3.76	3.76
1.50	3.63	3.83	4.02	4.22	4.41	4.51	4.51	4.51

ASTON SWEDEN AB
Hangarvägen 23
SE-691 35 Karlskoga
Sweden

Tel.: +46 586 216 600
info@astonsweden.com
www.astonsweden.com