

# PMJ-tec Fasteners for Rainscreen Cladding

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## PMJ-tec Technical Information

PMJ-tec recommend the use of a screw gun fitted with a depth setting nose cone for accurate and consistent washer compression during installation of fasteners. Do not use percussion or hammer drills.



## Recommended anti-corrosion performance of fasteners

Corrosivity Category	C1 - very low	C2 - Low	C3 - medium	C4 - high	C5 - very high
A2	up to 40 years	up to 40 years	up to 40 years	up to 30 years	see note
A4	up to 40 years	up to 40 years	up to 40 years	up to 30 years	see note

Warranty periods are indicative subject to conditions and correct installation using approved screw guns and sockets as per the NFRC Guidance Note GN01. Refer to PMJ-tec AG for full terms and conditions.

For C5 environments, including swimming pools, stainless steel grades 1.4547 and 1.4529 are recommended.

Information correct at time of going to print. For the purposes of continuous improvement we reserve the right to change product specifications. E. & O. E.



PMJ-tec is a Swiss roofing and facade fastener manufacturer specialising in A2, A4 and other high grade corrosion resistant stainless steel products, which can be supplied with a colour powder coated or nyco moulded head.

People are at the heart of our 'service and innovation' culture, along with a commitment to provide the ever-changing European and world markets with high quality product for both on and off site production, fully supported by experienced and honest technical expertise.

As a European manufacturer, we offer technical and application assistance worldwide.

Swiss made

Local experts



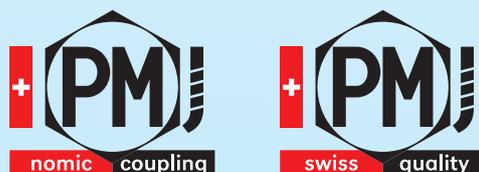
## PMJ – the name for quality and reliability

PMJ-tec AG (previously named MAGE AG) is a specialised Swiss manufacturer of bimetal drillscrews and nomic couplings.

In September 2014 after the management buy-out of the previous year we launched our new corporate name and brand PMJ.

PMJ's owner and CEO, Mark Jones, believes that the new logo reflects the company's core values, which combine the strong foundations built over the past 40 years with our nomic coupling production expertise together with our recent investment in high-tech manufacturing to produce bimetal drillscrews.

To retain the strong connection to the company's core product ranges, PMJ has integrated the well-known nomic brand into the new corporate logo for its pipe-coupling range and bimetal drillscrew range.



The company registration number (Eid. Nr. Ch-224-0530199-4) and registered address remain unchanged. All right, approvals and certifications held by MAGE AG, including European Technical Approvals, continue to be held by and are the property of PMJ-tec AG.

## Quality Assurance



Our ISO 9001 compliant system of batch numbers allows for the traceability of a finished product through the various stages of production even to the original batch of the wire, so that the customer has total confidence in our quality control. The details of the batch number which appears on the boxes and invoices is enough to ensure traceability of all the relevant quality control tests of our products.

PMJ-tec AG is the new company name of MAGE AG. The company registration number (Eid. Nr. Ch-224-0530199-4) and registered address remain unchanged. All rights, approvals and certifications held by MAGE AG, including European Technical Approvals and national approvals, continue to be held by and are the property of PMJ-tec AG

## ETA – European Technical Approval

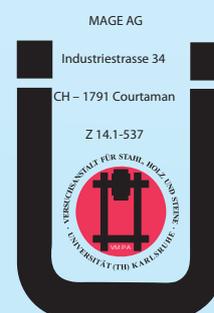


When you specify PMJ fasteners, you have the assurance of a high quality product, engineered with more than 30 years of knowledge of the fastener industry. In addition to a strict internal quality control underlying the PMJ fastening system, we have obtained European Technical Approval.

Approved by the German Institute for building technology (DIBT)



Test certificate



## Corrosion resistance of the austenitic stainless steel A2 and A4

Although it may be common use to classify martensitic steel alloys with the main component chromium as stainless steel, their application in cladding is NOT RECOMMENDED. These steel grades of the 400 series which are mostly hardened and galvanized offer a corrosion protection that is only equal to that of carbon steel fasteners with anticorrosion coating. On top of this those screws are prone to show intercrystalline corrosion as well as hydrogenous brittleness - both effects can lead to disastrous failures.

PMJ and other responsible manufacturers strictly use austenitic types of stainless steel (300 series) - both for fully stainless fasteners that are mainly used as self-drilling fasteners in aluminium structures as well as for piasta bimetallic screws that can be used as self-drilling in steel purlins up to 15 mm thickness.

According to customer requirement we use both A2 and A4 material as raw material for our production. Both qualities are mainly alloyed with chromium and nickel. They can be easily identified by their non-magnetic properties - however cold forming can lead to minimal residual magnetism which does not have the slightest effect on the corrosion resistance.

A2 steel (AISI 304) is rustproof and resistant to atmospheric attack even under severe conditions.

A4 steel (AISI 316) with a higher content of chromium and nickel is acid resistant and used in the chemical industry as well as in constructions where the fastener is attacked by corrosive environment and cannot be accessed after installation such as in flat roofing or rainscreen claddings.

## Powder coating

### Why powder coating?

Powder coating technology is environmentally acceptable due to the lack of waste products from the manufacturing process. The excess powder, as known as the «overspray» is recycled and can be reused. This process is the most economical. Through the high requirements such as impact resistance and weather resistance, these have prompted the usage of powder coating. Therefore it is not surprising that other organizations such as aluminium profile manufacturers, fastener technology, machine and automobile industry have changed in the last few years from wet painting to powder coating.

### The process

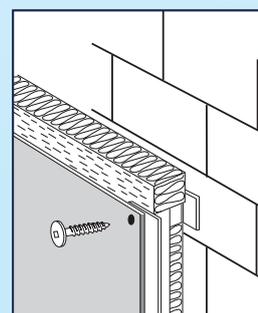
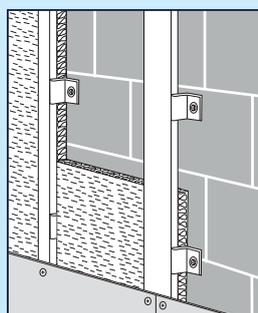
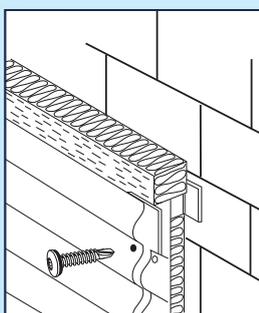
Firstly the coating powder will be liquidized in a powder container, and then with the help of injectors the liquid powder will be removed from the container and placed into a spray pistol. Once loaded into the pistol the liquidized powder will be sprayed under electrostatic high tension onto the fastener. There will be an electrical field generated between the grounded normally electrically conductive fastener and the spray pistol. The particles of powder will then bond onto the fastener. Afterwards the fasteners are heated in an oven and the powder melts. The result is a heavy-duty paintwork between 30-500µ according to specification.

### The powder

Different types of powder are used according to the application and attributes of the powder coating. PMJ uses polyester powder for its painting process. For specialized applications, structure, metallic, enamel or thin layered powder will be used. Our powder manufacturer can advise you competently for your application usage.

## Quick application overview

MAGE group	DIN like	Material	Typical application	Under-construction	Point	Head	Recess	
2141		A2	Panel		Timber	S-point	Low-profile	Square
2141T		A2	Panel		Timber	S-point	Low-profile	Torx 20
2142		A2	Panel		Timber	S-point	Low-profile	Square
2142T		A2	Panel		Timber	S-point	Low-profile	Torx 20
2144		A4	Panel		Timber	S-point	Flat round	Square
2145		A2	Panel		Timber	S-point	Pan	PH2
2155		A2	Panel		Timber	Red. point	Flat	PH2
2557		Bimetal A2	Steel profiles		Steel < 2,5	Drill point 2	Countersunk	PH2
7115		Bimetal A2	Sinusoidal sheets		Stitcher	Red. drill point 1	Low-profile	DS25
7180		Bimetal A2	Fibre boards		Steel or Alu	Drill point 2	Low-profile	DS25
7515		Bimetal A2	Steel profiles		Steel < 3,5	Drill point 2	Low-profile	DS25
7520		Bimetal A2	Steel profiles		Steel < 6,0	Drill point 3	Hex-washer	SW8
7524		Bimetal A4	Steel profiles		Steel < 6,0	Drill point 3	Hex-washer	SW8
7530		Bimetal A2	Steel profiles		Steel < 12,5	Drill point 5	Hex-washer	SW8
7534		Bimetal A4	Steel profiles		Steel < 12,5	Drill point 5	Hex-washer	SW8
7540		Bimetal A2	Steel profiles		Steel < 4,5	Drill point 3	Hex-washer	SW8 AF7
7544		Bimetal A4	Steel profiles		Steel < 4,5	Drill point 3	Hex-washer	SW8
7593		Bimetal A2	Steel profiles		Steel < 3,5	Drill point 3	Countersunk	DS25
7595		Bimetal A2	Steel profiles		Steel < 6,0	Drill point 3	Countersunk	DS25
7597E		Bimetal A2	Steel profiles		Steel < 8,0	Drill point 4	Low-profile	DS25
7610	7504K	A2	Alu profiles		Alu < 4,0	Drill point 3	Hex-washer	SW8
7612	7504K	A2	Alu profiles		Alu < 4,0	Drill point 3	Hex-washer	SW8
7614	7504K	A4	Alu profiles		Alu < 4,0	Drill point 3	Hex-washer	SW8
7620	7504O	A2	Alu profiles		Alu < 4,0	Drill point 2-3	Low-profile	Square
7621		A2	Alu profiles		Timber	Red. drill point 1	Low-profile	Square
7624	7504O	A4	Alu profiles		Alu < 4,0	Drill point 2-3	Low-profile	Square
7630		A2	Alu profiles		Timber	Red. drill point 1	Countersunk	Square
7631		A2	Alu profiles		Alu < 4,0	Drill point 2	Countersunk	Square
7631T		A2	Alu profiles		Alu < 4,0	Drill point 2	Countersunk	Square
7633		A2	Alu profiles		Alu	Self tapping B	Countersunk	Square
7634	7504M	A4	Alu profiles		Alu < 4,0	Drill point 2-3	Countersunk	Square
7652		A4	Alu profiles		Steel < 3,0	Self tapping A	Hex-washer	SW8
7653		A2	Alu profiles		Steel < 3,0	Self tapping A	Hex-washer	SW8
7663		A2	Alu profiles		Steel < 3,0	Self tapping AB	Hex-washer	SW8
7672		A4	Alu profiles		Steel	Self tapping B	Hex-washer	SW8
7673		A2	Alu profiles		Steel	Self tapping B	Hex-washer	SW8

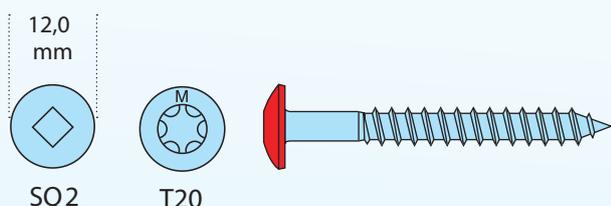


– typically supplied painted

## Fasteners for fastening façade panels to various under-construction

### 2141, 2141T Timber

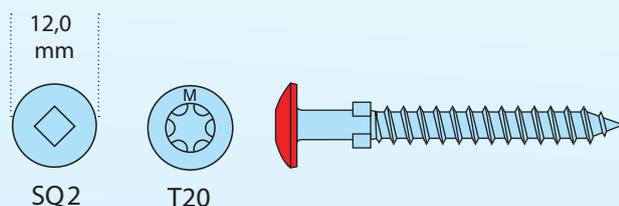
Fully stainless (A2) low-profile-head fastener with square recess, with S-point, for fastening façade panels to timber. 2141 with SQ2 recess, 2141T with T20 recess.



Ø x length [mm]
4,8 x 25
4,8 x 32
4,8 x 38
4,8 x 50
4,8 x 60

### 2142, 2142T Timber

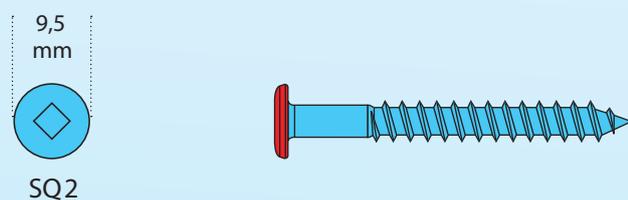
Fully stainless (A2) low-profile-head fastener with square recess, with S-point and wings, for fastening façade panels to timber. 2142 with SQ2 recess, 2142T with T20 recess.



Ø x length [mm]
4,8 x 38

### 2144 Timber

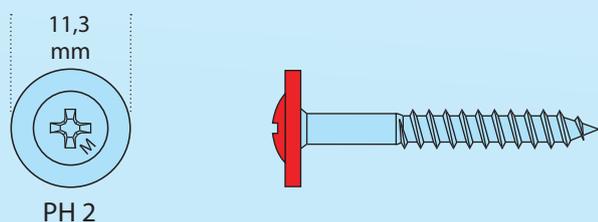
Fully stainless (A4) flat-round-head fastener with square recess, with S-point, for fastening façade panels to timber.



Ø x length [mm]
4,8 x 36

### 2145 Timber

Fully stainless (A2) pan-head fastener with Philips № 2 recess, with S-point, for fastening façade panels to timber.

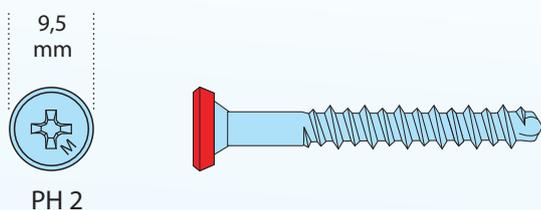


Ø x length [mm]
4,8 x 45

Red-head – typically supplied painted

## 2155 Timber

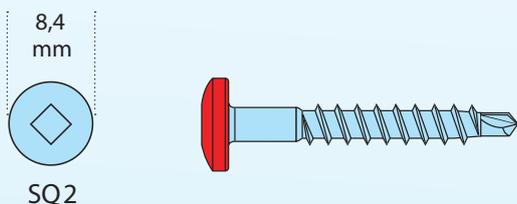
Fully stainless (A2) countersunk-head fastener with Philips № 2 recess, for fastening façade panels to timber.



Ø x length [mm]
5,5 x 25
5,5 x 35
5,5 x 45
5,5 x 55

## 7621 Timber

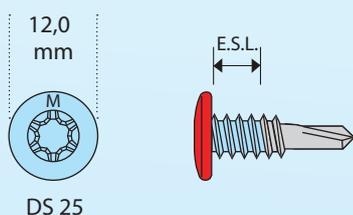
Fully stainless (A2) pan-head fastener with square recess, with drill-point № 1, for fastening to wood substructure.



Ø x length [mm]
4,2 x 35
4,2 x 45
4,2 x 52

## 7115 Alu Steel

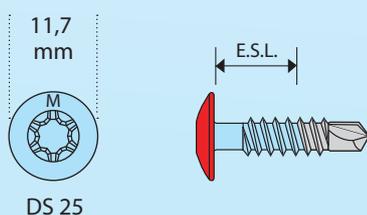
bimetal stainless steel (A2) low-profile-head fastener with DS 25 recess, with reduced drill-point № 1, for stitching overlapping profiled sinusoidal sheets together to a maximum of 2 x 1,25 mm.



	Ø x length [mm]	E.S.L. [mm]
	5,5 x 25	9
Max. drill capacity [mm]:	2 x 1,25	
Drill point №:	1	

## 7180 Alu Steel

bimetal stainless steel (A2) pan-head fastener with DS 25 recess, with drill-point № 2, for fastening fibre panels to steel or aluminium profiles of 0,75 – 2,5 mm.



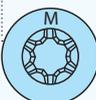
	Ø x length [mm]	E.S.L. [mm]
	4,8 x 25	12
Max. drill capacity [mm]:	2,5	
Drill point №:	2	

Red-head – typically supplied painted  
E.S.L. = effective stainless length

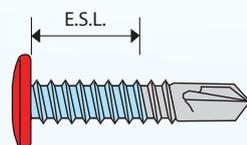
7515  Alu  Steel

bimetal stainless steel (A2) fastener, with special low profile low-profile-head, DS 25 recess, drill-point № 2, for fastening to steel profiles from 1,2 to 3,5 mm.

12,0  
mm



DS 25



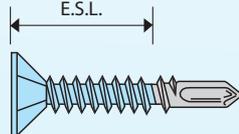
Ø x length [mm]	E.S.L. [mm]
5,5 x 28	12
Max. drill capacity [mm]:	3,5
Drill point №:	2

7593  Alu  Steel

bimetal stainless steel (A2) countersunk-head fastener with Torx recess, drill point № 3 for fastening to steel profiles from 1,5 to 3,5 (4,5) mm.

8,0  
mm

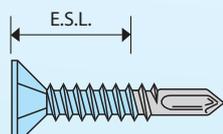




Ø x length [mm]	E.S.L. [mm]
4,2 x 28	18
Max. drill capacity [mm]:	3,5
Drill point №:	3

9,5  
mm





Ø x length [mm]	E.S.L. [mm]
4,8 x 25	18
Max. drill capacity [mm]:	4,5
Drill point №:	3

Red-head – typically supplied painted  
E.S.L. = effective stainless length

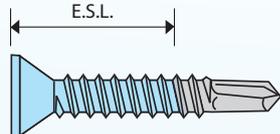
### 7595 Alu Steel

bimetal stainless steel (A2) drill-screw, with countersunk-head, DS 25 recess, with drill-point № 3, for fastening to steel profiles from 2,0 to 6,0 mm.

9,5 mm



DS 25



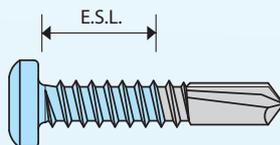
Ø x length [mm]	E.S.L. [mm]
4,8 x 28	18
Max. drill capacity [mm]:	6,0
Drill point №:	3

### 7597E Steel

bimetal stainless steel (A2) drill-screw, with low-profile-head, DS 25 recess, with drill-point № 4, for fastening to steel profiles from 2,0 – 8,0 mm.

9,0 mm





Ø x length [mm]	E.S.L. [mm]
4,8 x 28	12
Max. drill capacity [mm]:	8,0
Drill point №:	4

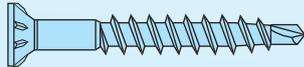
### 7630 Timber

Fully stainless (A2) countersunk-head fastener with ribs, square recess, with reduced drill-point № 1, for fastening to timber.

7,5 mm



SQ2



Ø x length [mm]
4,0 x 35
4,2 x 45

### 7631, 7631T Alu

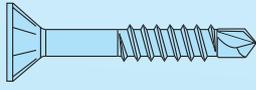
Fully stainless (A2) countersunk-head fastener with ribs, square recess, with drill-point № 2, for fastening to aluminium profiles from 1,5 to 4,0 mm.

Also available with a pilot point as 7632. 7631 with SQ2 recess, 7631T with T25 recess

9,5 mm




T25



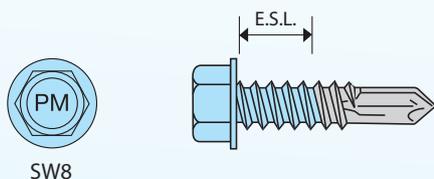
Ø x length [mm]	
4,8 x 28	
4,8 x 48	
Max. drill capacity [mm]:	4,0
Drill point №:	2

E.S.L. = effective stainless length

## Fasteners similar to DIN 7504 for fastening to various steel or aluminium profiles

7520  Alu  Steel

bimetal stainless steel (A2) hex-washer-head (SW8) fastener, with drill-point № 3, for fastening to steel profiles from 1,5 to 6,0 mm.

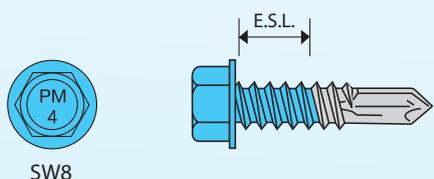


Max. drill capacity [mm]:  
Drill point №:

Ø x length [mm]	E.S.L. [mm]
5,5 x 26	10
5,5 x 32	16
5,5 x 38	22
Max. drill capacity [mm]:	6,0
Drill point №:	3

7524  Alu  Steel

bimetal stainless steel (A4) hex-washer-head (SW8) fastener, with drill-point № 3, for fastening to steel profiles from 1,5 to 6,0 mm.



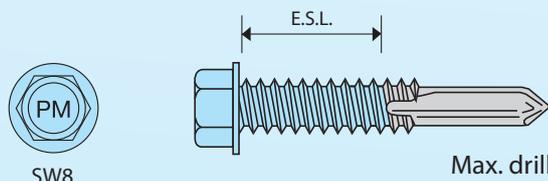
Max. drill capacity [mm]:  
Drill point №:

Ø x length [mm]	E.S.L. [mm]
5,5 x 26	10
5,5 x 32	16
5,5 x 38	22
Max. drill capacity [mm]:	6,0
Drill point №:	3

7530  Alu  Steel

bimetal stainless steel (A2) hex-washer-head (SW8) fastener, with drill-point № 5, for fastening to steel profiles from 4,0 to 12,5 mm.

On request we can supply also longer lengths.

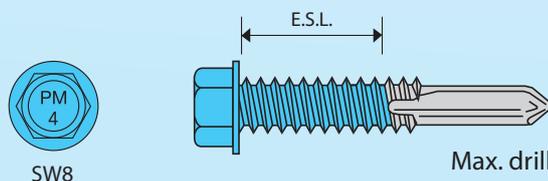


Max. drill capacity [mm]:  
Drill point №:

Ø x length [mm]	E.S.L. [mm]
5,5 x 40	16
Max. drill capacity [mm]:	12,5
Drill point №:	5

7534  Alu  Steel

bimetal stainless steel (A4) hex-washer-head (SW8) fastener, with drill-point № 5, for fastening to steel profiles from 4,0 to 12,5 mm.



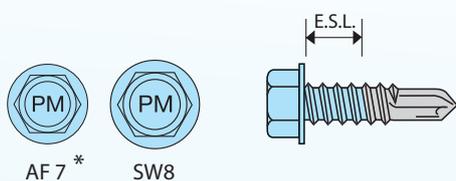
Max. drill capacity [mm]:  
Drill point №:

Ø x length [mm]	E.S.L. [mm]
5,5 x 40	16
Max. drill capacity [mm]:	12,5
Drill point №:	5

E.S.L. = effective stainless length

**7540**  Alu  Steel

bimetal stainless steel (A2) hex-washer-head (AF7 or SW8) fastener with drill-point № 3, for fastening to steel profiles from 1,2 to 4,5 mm.

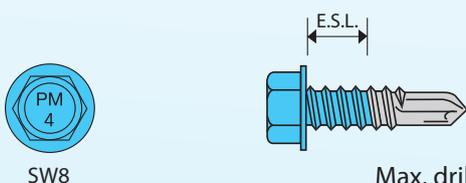


Max. drill capacity [mm]:  
Drill point №:

Ø x length [mm]	E.S.L. [mm]
4,2 x 19*	8
4,8 x 22	10
4,2 x 24*	14
4,8 x 25	13
4,8 x 31	19
Max. drill capacity [mm]:	3,5    4,5
Drill point №:	3        3

**7544**  Alu  Steel

bimetal stainless steel (A4) hex-washer-head (SW8) fastener with drill-point № 3, for fastening to steel profiles from 1,2 to 4,5 mm.

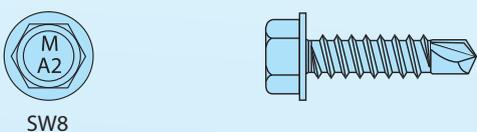


Max. drill capacity [mm]:  
Drill point №:

Ø x length [mm]	E.S.L. [mm]
4,2 x 16	5
4,8 x 22	10
Max. drill capacity [mm]:	3,5    4,5
Drill point №:	3        3

**7610**  Alu

Fully stainless (A2) hex-washer-head (SW8) fastener, with drill-point № 3, for fastening to aluminium profiles from 1,5 to 6,0 mm.

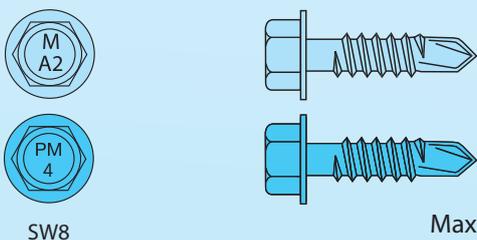


Max. drill capacity [mm]:  
Drill point №:

Ø x length [mm]	
5,5 x 20	
5,5 x 25	
5,5 x 32	
Max. drill capacity [mm]:	6,0
Drill point №:	3

**7612 & 7612A4**  Alu

Fully stainless (A2/A4) hex-washer-head (SW8) fastener, with free spin zone under the head, with drill-point № 2, for fastening to aluminium profiles from 1,5 to 4,0 mm.



Max. drill capacity [mm]:  
Drill point №:

Ø x length [mm]	free spin zone [mm]
5,5 x 19	3,0
5,5 x 20	5,0
5,5 x 22	7,0
Max. drill capacity [mm]:	4,0
Drill point №:	2

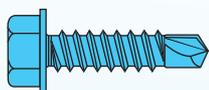
E.S.L. = effective stainless length

## 7614 Alu

Fully stainless (A4) hex-washer-head (SW8) fastener with drill-point № 3, for fastening to aluminium profiles from 1,5 to 6,0 mm.



SW8



	Ø x length [mm]		
	4,8 x 20		
	6,3 x 22		
	4,8 x 25	5,5 x 25	
		5,5 x 32	
		5,5 x 38	
Max. drill capacity [mm]:	4,0	5,0	6,0
Drill point №:	3	3	3

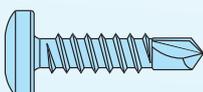
## 7620 Alu

Fully stainless (A2) pan-head fastener, square recess, with drill-point № 2 and 3, for fastening to aluminium profiles from 1,5 to 5,0 mm.

Head



SQ2



	Ø x length [mm]			
	3,5 x 9			
	4,2 x 16			
		4,8 x 20	5,5 x 20	
Max. drill capacity [mm]:	1,5	3,0	4,0	5,0
Drill point №:	2	2	3	3
Head diameter [mm]:	7,0-7,5	8,0	9,5	10,5

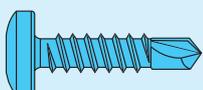
## 7624 Alu

Fully stainless (A4) pan-head fastener, square recess, with drill-point № 2 and 3, for fastening to aluminium profiles from 1,5 to 5,0 mm.

Head



SQ2

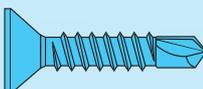


	Ø x length [mm]	
	4,8 x 16	
	5,5 x 32	
Max. drill capacity [mm]:	3,0	5,0
Drill point №:	3	3
Head diameter [mm]:	9,5	10,5

## 7634 Alu

Fully stainless (A4) countersunk-head fastener, square recess, with drill-point № 2 and 3, for fastening to aluminium profiles from 1,5 to 5,0 mm.

Head

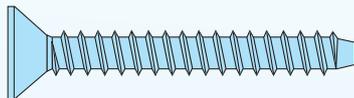
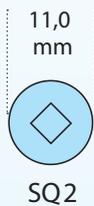


	Ø x length [mm]	
	4,2 x 19	4,8 x 19
	4,8 x 25	
Max. drill capacity [mm]:	3,0	4,0
Drill point №:	2	3
Head diameter [mm]:	8,0	9,5

## Self-tapping fasteners

7633  Alu

Fully stainless (A2) countersunk-head self-tapping fastener, type B, square recess, for fastening to aluminium under-construction.

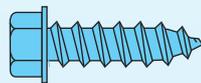


Sef-tapping type:

Ø x length [mm]
5,8 x 68
B

7652  Timber  Alu  Steel

Fully stainless (A4) hex-washer-head (SW8) self-tapping fastener, type A, for fastening steel or aluminium profiles to wood sub-structure or steel under-construction up to max. of 3,0 mm. On request we can supply also longer lengths.

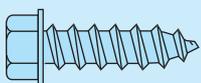


Sef-tapping type:

Ø x length [mm]
6,5 x 19
6,5 x 25
6,5 x 32
6,5 x 38
6,5 x 45
6,5 x 50
A

7653  Timber  Alu  Steel

Fully stainless (A2) hex-washer-head (SW8) self-tapping fastener, type A, for fastening steel or aluminium profiles to wood sub-structure or steel under-construction up to max. of 3,0 mm. On request we can supply also longer lengths.



Sef-tapping type:

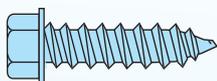
Ø x length [mm]
6,5 x 20
6,5 x 25
6,5 x 32
6,5 x 38
6,5 x 45
6,5 x 50
A

7663  Alu  Steel

Fully stainless (A2) hex-washer-head (SW8) self-tapping fastener, type AB.



SW8



Self-tapping type:

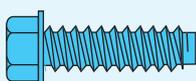
Ø x length [mm]
6,3 x 19
AB

7672  Alu  Steel

Fully stainless (A4) hex-washer-head (SW8) self-tapping fastener, type B, for fastening steel profiles to steel under-construction over 3,0 mm.



SW8



Self-tapping type:

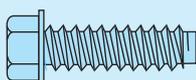
Ø x length [mm]
6,3 x 20
6,3 x 25
6,3 x 32
6,3 x 38
6,3 x 45
6,3 x 50
B

7673  Alu  Steel

Fully stainless (A2) hex-washer-head (SW8) self-tapping fastener, type B, for fastening steel profiles to steel under-construction over 3,0 mm.



SW8



Self-tapping type:

Ø x length [mm]
6,3 x 20
6,3 x 25
6,3 x 32
6,3 x 38
6,3 x 45
6,3 x 50
B



## Project References

PMJ has proven their fastener quality and supply reliability through numerous international prestige projects:



Terminal 3, Dubai International Airport, UAE



Southern Cross Train Station, Melbourne, Australia



Millennium Stadium, Cardiff, Wales



Stadium: MK, Milton Keynes, England



Hotel Intel, near Amsterdam, The Netherlands



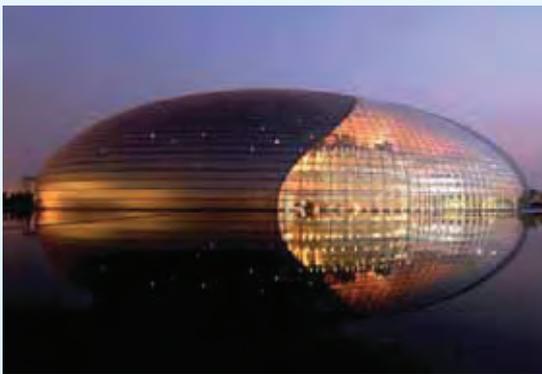
Socar Tower, Baku, Azerbaijan



Asia World Expo Hong Kong, PRC



Royal Opera House, Production Unit, London, England



National Centre for the Performing Arts, Beijing, PRC



Baltic Arena, Gdansk, Poland



Hotel Intel, near Amsterdam, The Netherlands



Qatar Science and Technology Park, Doha, Qatar

Our policy of continuing product development and improvement, necessitates that we reserve the right to modify designs shown in our catalogue without prior notice.

**Quality**



**Reliability**

**Verified**

**Warrantied**

**Approved**

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