

Attaching cladding panels

Cost-effective and aesthetic systems solutions.
SFS fastening technology offers reliable fastening solutions for every application, meeting the high standards of manufacturers and users.





Technical information

TW-S / TW-A4 cladding fasteners

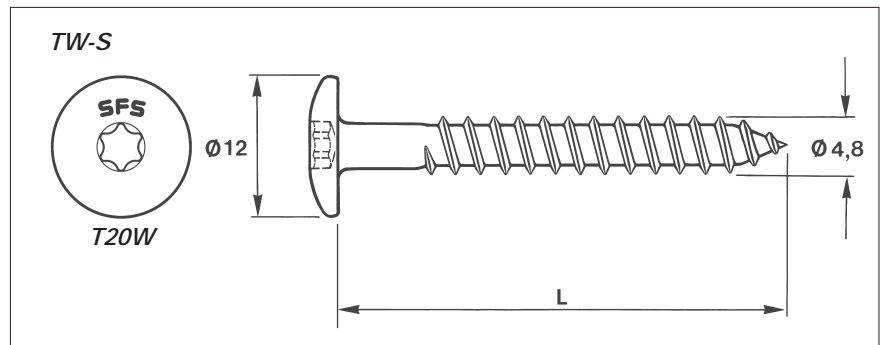
Material:

TW-S: Stainless steel (grade 304, DIN 1.4567)

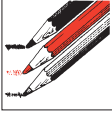

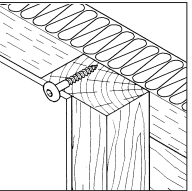
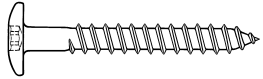
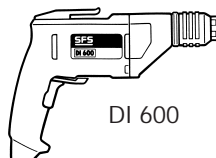

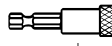

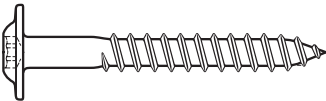
TW-A4: Stainless steel (grade 316, DIN 1.4401)

Application:

Fastening flat cladding panels to timber battens.



Example / Order code

Type	Material:	Head style (mm)	Thread-dia. <i>d</i> (mm)	Length <i>L</i> (mm)	
TW-S-		D12-	4,8x ...		 <p>Coloured fasteners</p> 
				38 44 60	 <p>DI 600</p>  <p>Z661</p>
					 <p>ZA 1/4"-universal (32 mm long)</p>  <p>T20W</p>
					<p>Diameter of pilot hole in cladding panels: flexible point: 8 mm fixed point: 6 mm</p>
				38	

Fastening MAX EXTERIOR cladding panels to aluminium or steel framework

Technical information

AP coloured rivet

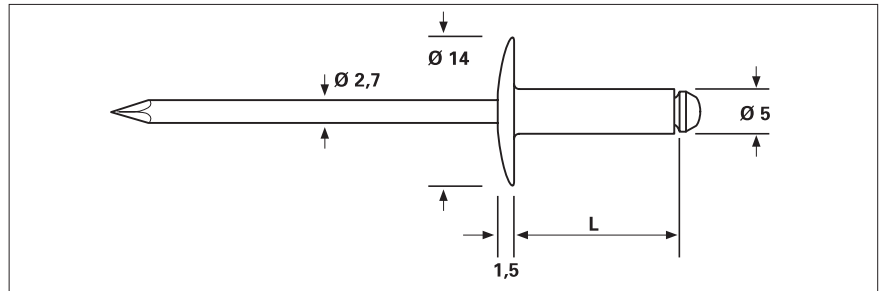
Material:

Sleeve: AIMg 5

Mandrel: Stainless steel (grade 304, DIN 1.4301)

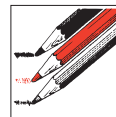
Application:

Face fixing high performance panels to aluminium or steel subframes.



Example / Order code

Type	Head dia. (mm)	Rivet body dia. (mm)	Rivet length L (mm)	Material mandrel S= stainless	Grip range KL (mm)
AP 14-		5x	... -	S	

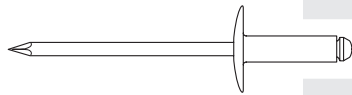
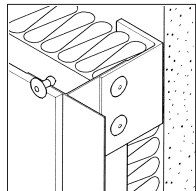


Coloured fasteners



Setting tool

AccuBird®



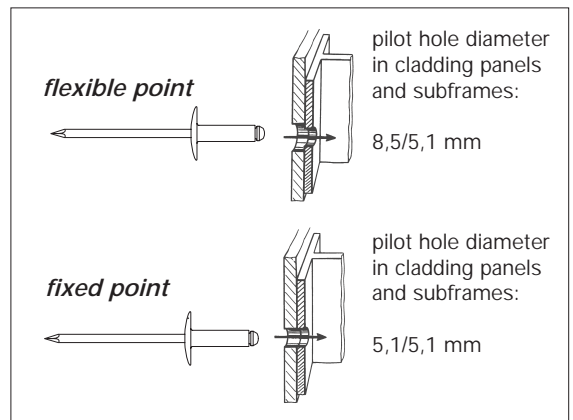
AP14-5x12-
AP14-5x18-
AP14-5x21-

S 5,0 - 9,5
S 10,5 - 15
S 13,5 - 18

Setting tools for efficient installation:
- AccuBird
- BZ 49 or BZ 56 riveting tool

Use rivet setting gauge dia. 14 / 0,3 mm

Installation:



Technical information

TU



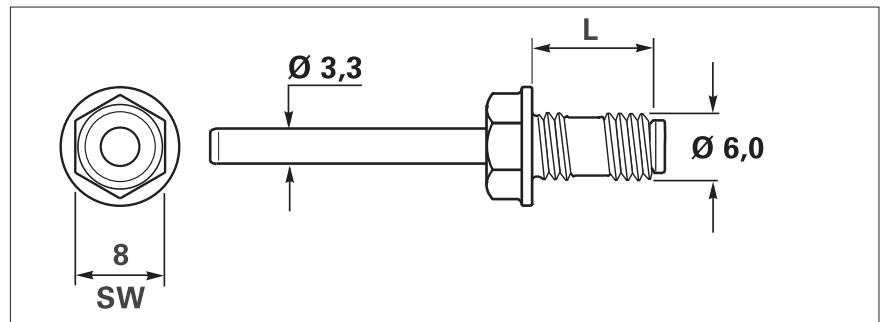
Material:

Sleeve: Stainless steel (grade 316, DIN 1.4401)

Mandrel: Carbon steel (is pulled off completely, i.e. no residue remains).

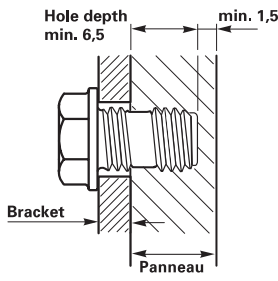
Application:

For cost-effective and reliable fastening of brackets or clips to the back of the panels.



Example / Order code

Type	Material S= stainless	Dia. (mm)	Length L (mm)	Panel thickness (mm)	Bracket* (mm)	
TU-	S-	6 x	...			 Setting tool Power Bird®
	S	6	9	8	2,5 - 3,5	 Setting tool SFS TPR50
				10	0,5 - 3,5	
				13	0,5 - 3,5	
			11	8	4,5 - 5,5	 Battery-powered screwgun SFS DI 412
				10	2,5 - 5,5	
				13	0,5 - 5,5	
			13	10	4,5 - 7,5	 HSS blind hole drill bit dia. 6,0 mm with stop.
				13	2,5 - 7,5	



HSS blind hole drill bit
dia. 6,0 mm with stop.

Bracket or clips requires
a 7,0 mm clearance hole.

*An appropriate washer must be used with smaller total thicknesses of material.



Technical information

GAZ

Material: Fasteners: Stainless steel (grade 304, DIN 1.4301)
 Sealing washers: Stainless steel with vulcanised EPDM
 Design elements: Anodised aluminium or polished stainless steel

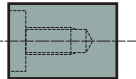
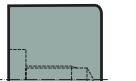
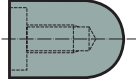
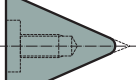
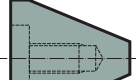
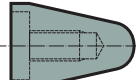
Setting tools
 - SFS E395 socket
 - ZA 1/4" drive
 - DI 600 electric screwgun
 or DI 412 battery-powered screwgun

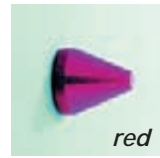






The design element can be assembled effortlessly on to the special fastener after installation, but cannot be removed again after curing.

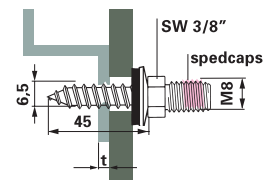
Colours and shapes to achieve fascinating effects
 Deliberately emphasising the fastening point is one way of achieving special aesthetic effects in cladding design or interior finishing.

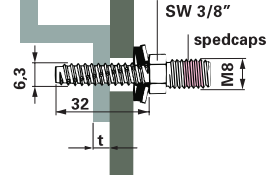
Exclusive effects can be achieved by means of fasteners projecting above the surface; these can be matched with the cladding in colour and shape. The range includes design elements in anodised aluminium or bright polished stainless steel.

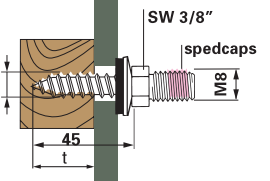
Example / Order code

Type	Shape	Material A= alu S= stain- less	Colour
GAZ - 807 - A - ...			
	GAZ - 801 - ...		
Ø 22 x 32 mm			
	GAZ - 803 - ...		
Ø 42 x 28 mm			
	GAZ - 804 - ...		
Ø 22 x 32 mm			
	GAZ - 806 - ...		
Ø 32 x 38 mm			
	GAZ - 807 - ...		
Ø 32 x 32 mm			
	GAZ - 811 - ...		
Ø 22 x 32 mm			

Type	Shape	Material A= alu S= stain- less	Colour
			red
			blue
			green
			black
			gold
			silver
			* mill finish

GA-AS-S16-6,5 x 45 C										
Fastening to thin steel or aluminium purlins										
										
<table border="0"> <tr> <td>t steel</td> <td>pilot hole dia.</td> </tr> <tr> <td>min. 1,0 - 1,25 mm</td> <td>4,0 mm</td> </tr> <tr> <td>1,26 - 3,0 mm</td> <td>4,9 mm</td> </tr> <tr> <td>t aluminium</td> <td>pilot hole dia.</td> </tr> <tr> <td>min. 3,0 mm</td> <td>4,8 mm</td> </tr> </table>	t steel	pilot hole dia.	min. 1,0 - 1,25 mm	4,0 mm	1,26 - 3,0 mm	4,9 mm	t aluminium	pilot hole dia.	min. 3,0 mm	4,8 mm
t steel	pilot hole dia.									
min. 1,0 - 1,25 mm	4,0 mm									
1,26 - 3,0 mm	4,9 mm									
t aluminium	pilot hole dia.									
min. 3,0 mm	4,8 mm									

GA-BS-S16-6,3 x 32 C								
Fastening to steel purlins								
								
<table border="0"> <tr> <td>t steel</td> <td>pilot hole dia.</td> </tr> <tr> <td>min. 3,1 - 5,0 mm</td> <td>5,3 mm</td> </tr> <tr> <td>5,1 - 10,0 mm</td> <td>5,8 mm</td> </tr> <tr> <td>> 10,0 mm</td> <td>5,9 mm</td> </tr> </table>	t steel	pilot hole dia.	min. 3,1 - 5,0 mm	5,3 mm	5,1 - 10,0 mm	5,8 mm	> 10,0 mm	5,9 mm
t steel	pilot hole dia.							
min. 3,1 - 5,0 mm	5,3 mm							
5,1 - 10,0 mm	5,8 mm							
> 10,0 mm	5,9 mm							

GA-AS-S16-6,5 x 45 C				
Fastening to timber battens				
				
<table border="0"> <tr> <td>t</td> <td>pilot hole dia.</td> </tr> <tr> <td>min. 38 mm</td> <td>4,0 mm</td> </tr> </table>	t	pilot hole dia.	min. 38 mm	4,0 mm
t	pilot hole dia.			
min. 38 mm	4,0 mm			

* stainless steel only

Coloured cladding panels aesthetically attached

Meeting aesthetic requirements with SFS colour matched fasteners

A building isn't simply accommodation – it can also be the “face” of the client who inhabits it. Clients now expect their buildings should continue to present an appropriate corporate image throughout the design life of the building. To help architects and designers to achieve this, SFS offers colour head fasteners – complete with coloured washers – which colour match the external sheet perfectly, and provide a less obtrusive, more aesthetically pleasing finish, that will go on looking good for many years to come. Our colour matching solution for all fasteners is to lacquer the head and washer face with a dry polyester powder which is then electrostatically baked on the head and washer face of the fastener.



A strong partner with in-house manufacturing facilities: the international SFS Group.

Cold forming technology: the basis for cost-effective fastening elements

Many years of manufacturing experience from production plants in four different European countries and the USA make SFS a competent partner in mechanical fastening technology. High-precision components and fastening elements are manufactured on the basis of cold forming technology for use throughout the world.



Quality as corporate philosophy

The high quality standards of SFS products and services are guaranteed by fully integrated quality controls. Statistical process control is used in all SFS plants to monitor every operation in detail at all stages of the processing chain. These systematic SPC inspections throughout the entire manufacturing process are the basis for the continuous quality of SFS products. It goes without saying that SFS fasteners hold the necessary approvals and test certificates issued by national and international testing institutions.

Quality and environmental protection

SFS is certified for compliance with ISO 9001/ISO 9004 since 1987. ISO 14001 and VDA No. 6.1 were added in early 1996 and AQ 9000 in January 1998. When it comes to quality, environmental consciousness and safety we not only comply with requirements, we seek to exceed them. This means, for example, that we pay attention to all aspects of environmental protection from production through to packaging.



Partner in fastening technology – close to the customer worldwide

Based on leading-edge technology, high quality standards and expert applications advice, SFS fastening systems for roofing and cladding have proved themselves worldwide with great success.

We have sales organisations in most European countries and North America, as well as in selected Far East locations, assure SFS of a global presence. The product ranges designed to cover a wide spectrum of market requirements are available where you need them.

SFS customers also benefit from the experience of our Sales Engineers, who are in action day by day on numerous construction sites throughout the world. Challenge us with your problems, we may already have a solution to them.



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