

# Roofing & Cladding

www.pmj-tec.com



# **Order Code Example:**

7310 fastener type (see 1<sup>st</sup> column below)

5,5 x 25 diameter x length length in **bold** = main dimension

fastener length [mm] fastener diameter [mm]

#### 7310 / 5,5 x 25 / S16 /NY-10A05

washer description (if needed)

S = stainlessG = galvanized R = rubber ring

NY - 10A05 colour description (if needed)

colour code (BS or RAL, see page 7)

NY = nylon head PP = powder painting

# **Application overview**

Fastener type	Page No.	Typical coating	Material	Typical application	Thickness	Typical substrate	Point	Head	Recess
7010	9	Zinc 250	Carbon steel	Steel sheets		Steel < 3,5	Drill-point 2	O UFO oval	DS25
7011	9	Zinc 250	Carbon steel	Steel sheets		Steel < 3,5	Drill-point 2	O UFO oval	DS25
7020	10	Zinc 250	Carbon steel	Steel sheets		Steel < 6,0	Drill-point 3	O UFO oval	DS25
7026	10	Zinc 250	Carbon steel	Steel sheets		Steel < 6,0	Drill-point 3	O UFO oval	DS30
7030	11	Zinc 250	Carbon steel	Steel sheets		Steel < 12,5	Drill-point 5	O UFO oval	DS25
7031	11	Zinc 250	Carbon steel	Steel sheets		Steel < 12,5	Drill-point 5	O UFO oval	DS25
7040	11	Zinc 250	Carbon steel	Steel sheets		Stitcher	Red. drill-point 1	O UFO oval	DS25
7041	11	Zinc 250	Carbon steel	Steel sheets		Stitcher	Red. drill-point 1	O UFO oval	DS25
7049	11	Zinc 250	Carbon steel	Steel sheets		Stitcher	Red. drill-point 1	O UFO oval	DS25
7060	12	Zinc 250	Carbon steel	Steel sheets		Timber	Red. drill-point 1	O UFO oval	DS25
7062	12	Zinc 250	Carbon steel	Panels		Steel < 3,5	Drill-point 2	O UFO oval	DS25
7070	13	Zinc 250	Carbon steel	Panels		Steel < 12,5	Drill-point 5	O UFO oval	DS25
7110	14	Dural 250	Bimetal A2	Steel sheets		Steel < 3,5	Drill-point 2	UFO oval	DS25
7115	15	Dural 250	Bimetal A2	Steel sheets		Stitcher	Red. drill-point 1	UFO oval	DS25
7120	15	Dural 250	Bimetal A2	Steel sheets		Steel < 6,0	Drill-point 3	UFO oval	DS25
7130	15	Dural 250	Bimetal A2	Steel sheets		Steel < 12,5	Drill-point 5	UFO oval	DS25
7140	16	Dural 250	Bimetal A2	Steel sheets		Stitcher	Red. drill-point 1	UFO oval	DS25
7141	16	Dural 250	Bimetal A2	Steel sheets		Stitcher	Red. drill-point 1	O UFO oval	DS25
7142	16	Dural 250	Bimetal A2	Steel sheets		Stitcher	Red. drill-point 1	O UFO oval	DS25
7160	16	Dural 250	Bimetal A2	Steel sheets		Timber	Red. drill-point 1	UFO oval	DS25
7180	16	Dural 250	Bimetal A2	Steel sheets		Steel < 2,5	Drill-point 2	O UFO oval	DS25
7182	16	Dural 250	Bimetal A2	Steel sheets		Steel < 6,0	Drill-point 4	O UFO oval	DS25
7213	17	Dural 250	Carbon steel	Secret fix clips		Steel < 5,0	Drill-point 3	Flat Hex	AF8
7214	17	Dural 250	Carbon steel	Secret fix clips		Timber	Red. drill-point 1	Flat Hex	AF8
7215	17	Dural 250	Carbon steel	Secret fix clips		Steel < 6,0	Drill-point 4	Flat Hex	AF8
7270	17	Dural 250	Carbon steel	Secret fix clips		Steel < 4,5	Drill-point 3	Flat	PH2
7310	18	Dural 250	Carbon steel	Steel sheets		Steel < 3,5	Drill-point 2	Hex / NYCO	AF8 / AF11
7310H	18	Dural 250	Carbon steel	Steel sheets		Steel < 3,5	Drill-point 2	Hex	AF8
7320	18	Dural 250	Carbon steel	Steel sheets		Steel < 3,5	Drill-point 2	Hex / NYCO	AF8 / AF11
7325	19	Dural 250	Carbon steel	Steel sheets		Steel < 6,0	Drill-point 3	Hex	AF 3/8"
7327	19	Dural 250	Carbon steel	Steel sheets		Steel < 6,0	Drill-point 3	Hex	AF8
7330	19	Dural 250	Carbon steel	Steel sheets		Steel < 12,5	Drill-point 5	Hex / NYCO	AF8 / AF11
7335	20	Dural 250	Carbon steel	Steel sheets		Stitcher	Red. drill-point 1	Hex / NYCO	AF8 / AF11
7336	20	Dural 250	Carbon steel	Steel sheets		Steel < 18,0	Drill-point 6	Hex-washer	AF8
7337K	17	Dural 250	Carbon steel	Secret fix clips		Steel < 12,5	Drill-point 5	Flat	PH3
7339	20	Dural 250	Carbon steel	Steel sheets		Stitcher	Red. drill-point 1	Hex-washer	AF8
7340	21	Dural 250	Carbon steel	Steel sheets		Stitcher	Red. drill-point 1	Hex / NYCO	AF8 / AF11
7341	21	Dural 250	Carbon steel	Steel sheets		Timber	Red. drill-point 1	Hex / NYCO	AF8 / AF11
7342	22	Dural 250	Carbon steel	Steel sheets		Steel < 3,5	Drill-point 2	Hex-washer	AF8
7343	22	Dural 250	Carbon steel	Steel sheets		Steel < 6,0	Drill-point 3	Hex-washer	AF8
7344	22	Dural 250	Carbon steel	Steel sheets		Steel < 12,5	Drill-point 5	Hex-washer	AF8
7346	23	Dural 250	Carbon steel	Steel sheets		Stitcher	Red. drill-point 1	Hex-washer	AF8
7347	23	Dural 250	Carbon steel	Steel sheets		Timber	Red. drill-point 1	Hex / NYCO	AF8 / AF11
7353	28	Dural 250	Carbon steel	Steel sheets		Steel < 3,0; pre-drilled	Self-tapping A	Hex	AF8
7360	24	Dural 250	Carbon steel	Panels		Steel < 6,0	Drill-point 3	Hex / NYCO	AF8 / AF11
7362	25	Dural 250	Carbon steel	Panels		Steel < 3,5	Drill-point 2	Hex / NYCO	AF8 / AF11
7370	26	Dural 250	Carbon steel	Panels		Steel < 12,5	Drill-point 5	Hex / NYCO	AF8 / AF11
7373	28	Dural 250	Carbon steel	Steel sheets		Steel > 3,0; pre-drilled	Self-tapping B	Hex	AF8
7373	27	Dural 250	Carbon steel	Panels		Timber	Red. drill-point 1	Hex / NYCO	AF8 / AF11
7411	29	Dural 250	Carbon steel	Timber		Steel < 5,0	Drill-point 3 + wings	Countersunk	T30
7411	29	Dural 250	Carbon steel	Timber		Steel < 5,0	Drill-point 3 + wings	Countersunk	DS15 - DS25
7412	30	Dural 250	Carbon steel	Timber		Steel < 12,5	Drill-point 5 + wings	Countersunk	DS30
7415	30	Dural 250	Carbon steel	Timber		Steel < 12,5	Drill-point 5 + wings	Countersunk	DS30
7-125	30	201 GT 200	Cui Doli Steel	Tillibel		3.661 < 10,0	Z.III POINT O + WINGS	Counterbunk	2330

# **Order Code Example:**

7310 fastener type (see 1<sup>st</sup> column below)

5,5 x 25 diameter x length

length in **bold** = main dimension

fastener length [mm] fastener diameter [mm]

#### 7310 / 5,5 x 25 / S16 /NY-10A05

washer description (if needed)

washer diameter [mm], see page 56
stainless A = aluminium
galvanized R = rubber ring S = stainless

G = galvanized R = rubber ring

NY - 10A05 colour description (if needed)

colour code (BS or RAL, see page 7)

NY = nylon head PP = powder painting



Fastener type	Page No.	Typical coating	Material	Typical application	Thickness	Typical	substrate	Point	Head	Recess
7426	31	Dural 250	Carbon steel	Timber			Steel < 6,0	Drill-point 3 + wings	Countersunk	DS30
7431	31	Dural 250	Carbon steel	Timber			Composite panels	Drill-point 1	Countersunk + ribs	DS30
7441	32	Dural 1000	Carbon steel	Fibre-cement sheets			Steel < 6,0	Drill-point 3	Hex	AF8
7442	32	Dural 1000	Carbon steel	Fibre-cement sheets			Steel < 6,0	Drill-point 3	Hex	AF8
7442E	32	Dural 1000	Bimetal A2	Fibre-cement sheets			Steel < 6,0	Drill-point 3	Hex	AF8
7451	33	Dural 1000	Carbon steel	Fibre-cement sheets			Steel < 12,5	Drill-point 5	Hex	AF8
7452	33	Dural 1000	Carbon steel	Fibre-cement sheets			Steel < 12,5	Drill-point 5	Hex	AF8
7456	34	Dural 1000	Carbon steel	Fibre-cement sheets		111271	Timber	Drill-point 1	Hex	AF8
7457	35	Dural 1000	Carbon steel	Fibre-cement sheets		111271	Timber	Special drill-point 1	Hex	AF8
7457E	35	Dural 1000	A2	Fibre-cement sheets		111271	Timber	Special drill-point 1	Hex	AF8
7457E	35	Dural 1000	A4	Fibre-cement sheets		111271	Timber	Special drill-point 1	Hex	AF8
7510	36	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 3,5	Drill-point 2	Hex / NYCO	AF8 / AF11
7515	15	Dural 250	Bimetal A2	Steel sheets			Steel < 3,5	Drill-point 2	UFO oval	DS25
7516	37	Dural 250	Bimetal A2	Halter clips			Steel < 1,6	Red. drill-point 1	Hex	AF8
7517	37	Dural 250	Bimetal A2	Halter clips			Steel < 3,5	Drill-point 2	Hex	AF8
7518	37	Dural 250	Bimetal A2	Halter clips		111211	Steel < 1,6, Timber	Red. drill-point 1	Hex	AF8
7519	37	Dural 250	Bimetal A2	Halter clips			Steel < 3,2	Drill-point 2	Hex	AF8
7520	38	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 6,0	Drill-point 3	Hex / NYCO	AF8 / AF11
7521	38	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 6,0	Drill-point 3	Hex / NYCO	AF8 / AF11
7524	38	Dural 250	Bimetal A4	Steel / alu sheets			Steel < 6,0	Drill-point 3	Hex	AF8
7525	39	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 6,0	Drill-point 3	Hex / NYCO	AF8 / AF11
7530	40	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 12,5	Drill-point 5	Hex / NYCO	AF8 / AF11
7534	40	Dural 250	Bimetal A4	Steel / alu sheets			Steel < 12,5	Drill-point 5	Hex	AF8
7540	40	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 3,5	Drill-point 3	Hex / NYCO 🔵	AF7 / AF8 / AF11
7543	41	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 3,0	Drill-point 2	Oval	ROB 2
7544	41	Dural 250	Bimetal A4	Steel / alu sheets			Steel < 3,5	Drill-point 3	Hex	AF8
7546	41	Dural 250	Bimetal A2	Halter clips			Steel < 1,0	Red. drill-point 1	Flat	DS20
7548	41	Dural 250	Bimetal A2	Halter clips			Steel < 1,0	Red. drill-point 1	Flat	DS20
7549	42	Dural 250	Bimetal A2	Secret fix clips			Steel < 1,0	Red. drill-point 1	Flat Hex	AF8
7550	42	Dural 250	Bimetal A2	Steel sheets		<b>===</b>	Stitcher	Red. drill-point 1	Hex / NYCO	AF8 / AF11
7553	43	Dural 250	Bimetal A2	Steel sheets		<b>===</b>	Stitcher	Red. drill-point 1	Hex / NYCO	AF8 / AF11
7554	43	Dural 250	Bimetal A4	Steel sheets		<b>**</b>	Stitcher	Red. drill-point 1	Hex	AF8
7561	43	Dural 250	Bimetal A2	Steel sheets		111571	Timber	Red. drill-point 1	Hex / NYCO 🔵	AF8 / AF11
7563	44	Dural 250	Bimetal A2	Steel sheets		<b>&gt;&gt;&gt;</b>	Stitcher	Swarf-free stitcher	Hex / NYCO	AF8 / AF11
7565	43	Dural 250	Bimetal A2	Steel sheets		111571	Timber	Red. drill-point 1	Hex	AF8
7570	44	Dural 250	Bimetal A2	Panels			Steel < 6,0	Drill-point 3	Hex / NYCO 🔵	AF8 / AF11
7571	45	Dural 250	Bimetal A2	Panels			Steel < 3,5	Drill-point 2	Hex / NYCO	AF8 / AF11
7575	46	Dural 250	Bimetal A2	Panels			Steel < 12,5	Drill-point 5	Hex / NYCO	AF8 / AF11
7580	47	Dural 250	Bimetal A2	Panels		111571	Timber	Red. drill-point 1	Hex / NYCO 🔵	AF8 / AF11
7591	48	Dural 250	Bimetal A2	Timber			Steel < 5,0	Drill-point 3 + wings	Countersunk	DS25
7592	48	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 2,0	Red. drill-point 1 + wings	Countersunk	DS25
7593	48	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 3,5	Drill-point 3	Countersunk	T20 / T25
7595	48	Dural 250	Bimetal A2	Steel / alu sheets			Steel < 6,0	Drill-point 3	Countersunk	DS25
7596	49	Dural 250	Bimetal A2	Timber			Composite panels	Drill-point 1	Countersunk + ribs	DS25
7641	49	Dural 250	A2	Steel sheets		111571	Timber	Special drill-point 1	Hex / NYCO 🔵	AF8 / AF11
7652	50	Dural 250	A4	Steel sheets			Steel < 3,0; pre-drilled	Self-tapping A	Hex	AF8
7653	50	Dural 250	A2	Steel sheets			Steel < 3,0; pre-drilled	Self-tapping A	Hex	AF8
7672	51	Dural 250	A4	Steel sheets			Steel > 3,0; pre-drilled	Self-tapping B	Hex	AF8
7673	51	Dural 250	A2	Steel sheets			Steel > 3,0; pre-drilled	Self-tapping B	Hex	AF8
7673K	52	Dural 250	A2	Panels		5	Steel > 3,0; pre-drilled	Self-tapping B	Hex	AF8
7680	53	Dural 250	A2	Panels		111571	Timber	Special drill-point 1	Hex / NYCO 🌑	AF8 / AF11
7890	54	Dural 250	Carbon steel	Steel sheets / Panels			Concrete		Hex	AF8
7890E	54	Dural 250	A2	Steel sheets / Panels			Concrete		Hex	AF8





# 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 it's pipe-coupling range and the brand for it's 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.



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 numerous technical approvals which also involve independent 3<sup>rd</sup> party control visits to our factory every year.



#### **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



## **SQS Certificate**





## **Durability of PMJ fasteners**

It is important for the building owner to have confidence in the products selected and their long term durability. PMJ has built it's reputation on supplying reliable quality products, ensuring product suitability for each application and high quality corrosion resistant finishes on all fasteners.

PMJ is recognised throughout the European fastener world as one of the leading companies in corrosion protection, and was the first to apply an inorganic anticorrosion coating to all of our fasteners. In line with other leading fastener manufacturers supplying the European market, PMJ's recommendations on the durability of fasteners follow the appropriate European industry standards including the UK's MCRMA guidance document "Fasteners for metal roof and wall cladding: design, detailing and installation guide".

All PMJ carbon steel fasteners with Dural 250 plus coating with the integral coloured nylon heads for use on buildings with dry & low humidity comply with BS7543:2003 Guide to durability of buildings and building elements, products and components. Certain applications in exposed areas or aggressive environments require different solutions; please refer to our technical brochure for details.

The PMJ **bimetal** and fully stainless fastener ranges are manufactured using 304/A2 and 316/A4 grade austenitic stainless steel. These steel grades are mainly alloyed with chromium and nickel and 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.

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

The following image gives a clear indication of the high resistance to corrosion our carbon steel fasteners with Dural plus coatings and austenitic stainless steel fasteners have to offer.





# **Durability of PMJ fasteners**

Fasteners	Environn	ement	Life expectancy of fasteners	Sheet / Deck Material (see footnotes)				
materials	F	Internal humidity grade		Aluminium	Coated steel	Stainless steel	GRP / PVC fibrecement	
	External exposure		(see footnotes)	М	inimal washe	r diameter [mi	m]	
				19	16	16	29	
	Urban / Rural	All grades	25+	Υ	Υ	Y	Y	
Austenitic stainless steel	Industrial	All grades	25+	Υ	Υ	Υ	Υ	
	Coastal / Marine	All grades	25+	Υ	Υ	Y	Υ	
	Urban / Rural	Dry & Low	15 / 25	N	Υ	N	Y	
Coated carbon		High	10 / 15	N	С	N	С	
steel with integral	Industrial	Dry & Low	15 / 20	N	С	N	С	
nylon coloured		High	10	N	С	N	С	
head	Coastal / Marine	Dry & Low	-	N	N	N	N	
	Coastar/ Marine	High	-	N	N	N	N	
	Urban / Rural	Dry & Low	10 / 20	N	Υ	N	Υ	
Coated	Orbany Karai	High	10 / 15	N	С	N	С	
carbon steel & push	Industrial	Dry & Low	10 / 15	N	С	N	С	
on plastic	muustriur	High	10	N	С	N	С	
colour cap	Coastal / Marine	Dry & Low	-	N	N	N	N	
	Coustal / Marille	High	-	N	N	N	N	

KEY: Y = Recommended N = not recommended C = Check suitability with sheet manufacturer and PMJ

Note 1: The above periods are for the fasteners functional life expectancy.

Please consult the sheet manufacturer regarding the most appropriate sheet material and coating system and its functional life in the particular environment.

Note 2: Carbon steel fasteners which are non-exposed to the external environment have a functional life that is similar to those tabled above for carbon steel with integral colour head.

Note 3: The period shown is the functional life expectancy. If a specific project warranty is needed please consult PMJ



## **Powder coating**

Powder coating technology is environmentally acceptable due to the lack of waste products from the manufacturing process, because the excess powder overspray is recycled.

The use of powder coating has been prompted by high requirements of impact and weather resistance, which is why many other organisations such as aluminium profile manufacturers, fastener technology, machine and automobile industry have changed in the last few years from wet painting to powder coating. PMJ uses polyester powder due to its excellent colour and durability properties.

## Standard range of British Standards and RAL colour references

The most popular colours are generally available within a short delivery lead time; other colours are manufactured to order.

Special colours can be produced with extended lead times which may be subject to an additional cost.

RAL references           RAL 1015         Light Elf's Leg         RAL 7016         Anthracite Grey           RAL 3000         Fire Red         RAL 7022         Umber Grey           RAL 3004         Burano         RAL 7024         Graphitgrau           RAL 3009         Oxide Red         RAL 7031         Blue Grey           RAL 3011         Brown Red         RAL 7035         Oyster           RAL 3013         Tomato Red         RAL 7035         Oyster           RAL 5002         Ultramarine         RAL 7038         Agate Grey           RAL 5003         Sargasso/Sapphire Blue         RAL 7040         Window Grey           RAL 5007         Brilliant Blue         RAL 8004         Copper Brown           RAL 5009         Azure Blue         RAL 8001         Nut Brown           RAL 5010         Flower Blue         RAL 8011         Nut Brown           RAL 5020         Ocean Blue         RAL 8012         Red Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6002         Leaf Green         RAL 8019         Grey Brown           RAL 6003         Olive Green         RAL 9001         Cream White           RAL 6004         Bottle G								
RAL 3000         Fire Red         RAL 7024         Graphitgrau           RAL 3004         Burano         RAL 7024         Graphitgrau           RAL 3009         Oxide Red         RAL 7031         Blue Grey           RAL 3011         Brown Red         RAL 7035         Oyster           RAL 3013         Tomato Red         RAL 7037         Dusty Grey           RAL 5002         Ultramarine         RAL 7038         Agate Grey           RAL 5003         Sargasso/Sapphire Blue         RAL 7040         Window Grey           RAL 5007         Brilliant Blue         RAL 8004         Copper Brown           RAL 5009         Azure Blue         RAL 8011         Nut Brown           RAL 5010         Flower Blue         RAL 8012         Red Brown           RAL 5020         Ocean Blue         RAL 8012         Red Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6002         Leaf Green         RAL 8019         Grey Brown           RAL 6003         Olive Green         RAL 9001         Cream White           RAL 6005         Moss green         RAL 9002         Hamlet           RAL 6007         Bottle Green         RAL 9004         Signal Black </td <td colspan="8">RAL references</td>	RAL references							
RAL 3004         Burano         RAL 7024         Graphitgrau           RAL 3009         Oxide Red         RAL 7031         Blue Grey           RAL 3011         Brown Red         RAL 7035         Oyster           RAL 3013         Tomato Red         RAL 7038         Agate Grey           RAL 5002         Ultramarine         RAL 7040         Window Grey           RAL 5007         Brilliant Blue         RAL 8004         Copper Brown           RAL 5009         Azure Blue         RAL 8011         Nut Brown           RAL 5010         Flower Blue         RAL 8012         Red Brown           RAL 5020         Ocean Blue         RAL 8014         Sepia Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6001         Leaf Green         RAL 8019         Grey Brown           RAL 6002         Leaf Green         RAL 9001         Cream White           RAL 6003         Moss green         RAL 9001         Cream White           RAL 6007         Bottle Green         RAL 9004         Signal Black           RAL 7008         Ral 9006         Silver           RAL 7	RAL 1015	Light Elf's Leg		RAL 7016	Anthracite Grey			
RAL 3009         Oxide Red         RAL 7031         Blue Grey           RAL 3011         Brown Red         RAL 7035         Oyster           RAL 3013         Tomato Red         RAL 7037         Dusty Grey           RAL 5002         Ultramarine         RAL 7038         Agate Grey           RAL 5003         Sargasso/Sapphire Blue         RAL 7040         Window Grey           RAL 5009         Azure Blue         RAL 8004         Copper Brown           RAL 5009         Azure Blue         RAL 8011         Nut Brown           RAL 5010         Flower Blue         RAL 8012         Red Brown           RAL 5010         Flower Blue         RAL 8011         Nut Brown           RAL 6020         Ocean Blue         RAL 8017         Chocolate Brown           RAL 6002         Leaf Green         RAL 8017         Chocolate Brown           RAL 6003         Olive Green         RAL 9001         Cream White           RAL 6007         Bottle Green         RAL 9002         Hamlet	RAL 3000	Fire Red		RAL 7022	Umber Grey			
RAL 3011         Brown Red         RAL 7035         Oyster           RAL 3013         Tomato Red         RAL 7037         Dusty Grey           RAL 5002         Ultramarine         RAL 7038         Agate Grey           RAL 5003         Sargasso/Sapphire Blue         RAL 7040         Window Grey           RAL 5007         Brilliant Blue         RAL 8004         Copper Brown           RAL 5009         Azure Blue         RAL 8011         Nut Brown           RAL 5010         Flower Blue         RAL 8012         Red Brown           RAL 5020         Ocean Blue         RAL 8012         Red Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6000         Patina Green         RAL 8019         Grey Brown           RAL 6001         Green         RAL 8019         Grey Brown           RAL 6002         Leaf Green         RAL 8019         Grey Brown           RAL 6003         Olive Green         RAL 9001         Cream White           RAL 6005         Moss green         RAL 9002         Hamlet           RAL 6011         Resada Green         RAL 9005         Jet Black           RAL 7000         Squirrel Gree         RAL 9007         Grey Aluminium	RAL 3004	Burano		RAL 7024	Graphitgrau			
RAL 3013         Tomato Red         RAL 7037         Dusty Grey           RAL 5002         Ultramarine         RAL 7038         Agate Grey           RAL 5003         Sargasso/Sapphire Blue         RAL 7040         Window Grey           RAL 5007         Brilliant Blue         RAL 8004         Copper Brown           RAL 5009         Azure Blue         RAL 8011         Nut Brown           RAL 5010         Flower Blue         RAL 8012         Red Brown           RAL 5020         Ocean Blue         RAL 8014         Sepia Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6002         Leaf Green         RAL 8019         Grey Brown           RAL 6002         Leaf Green         RAL 8019         Grey Brown           RAL 6003         Olive Green         RAL 9001         Cream White           RAL 6007         Bottle Green         RAL 9002         Hamlet           RAL 6011         Resada Green         RAL 9004         Signal Black           RAL 7000         Squirrel Grey         RAL 9006         Silver           RAL 7012         Basalt Grey         RAL 9007         Grey Aluminium           RAL 9011         Graphite Black    **BS 12821	RAL 3009	Oxide Red		RAL 7031	Blue Grey			
RAL 5002         Ultramarine         RAL 7038         Agate Grey           RAL 5003         Sargasso/Sapphire Blue         RAL 7040         Window Grey           RAL 5007         Brilliant Blue         RAL 8004         Copper Brown           RAL 5009         Azure Blue         RAL 8011         Nut Brown           RAL 5010         Flower Blue         RAL 8012         Red Brown           RAL 5020         Ocean Blue         RAL 8014         Sepia Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6002         Leaf Green         RAL 8019         Grey Brown           RAL 6003         Olive Green         RAL 9001         Cream White           RAL 6005         Moss green         RAL 9002         Hamlet           RAL 6007         Bottle Green         RAL 9004         Signal Black           RAL 6011         Resada Green         RAL 9005         Jet Black           RAL 7000         Squirrel Grey         RAL 9006         Silver           RAL 7012         Basalt Grey         RAL 9007         Grey Aluminium           RAL 9011         Graphite Black    **BS 00E55         White  **BS 12821         Moorland Green           BS 04C39         Terra	RAL 3011	Brown Red		RAL 7035	Oyster			
RAL 5003 Sargasso/Sapphire Blue RAL 7040 Window Grey RAL 5007 Brilliant Blue RAL 8004 Copper Brown RAL 5009 Azure Blue RAL 8011 Nut Brown RAL 5010 Flower Blue RAL 8012 Red Brown RAL 5020 Ocean Blue RAL 8014 Sepia Brown RAL 6000 Patina Green RAL 8017 Chocolate Brown RAL 6002 Leaf Green RAL 8019 Grey Brown RAL 6003 Olive Green RAL 9001 Cream White RAL 6005 Moss green RAL 9002 Hamlet RAL 6007 Bottle Green RAL 9004 Signal Black RAL 6011 Resada Green RAL 9005 Jet Black RAL 6020 Chrome Green RAL 9006 Silver RAL 7000 Squirrel Grey RAL 9007 Grey Aluminium RAL 7012 Basalt Grey RAL 9011 Graphite Black  British Standard references  BS 00E53 Black BS 12B21 Moorland Green BS 04C39 Terracotta BS 12B29 Juniper Green BS 04C39 Terracotta BS 12B29 Juniper Green BS 04E53 Poppy Red BS 14C37 Jade BS 08B29 Vandyke Brown BS 18B17 Albatross BS 18B 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 18B29 Grey BS 10B19 Mushroom BS 18C39 Ocean Blue	RAL 3013	Tomato Red		RAL 7037	Dusty Grey			
RAL 5007       Brilliant Blue       RAL 8004       Copper Brown         RAL 5009       Azure Blue       RAL 8011       Nut Brown         RAL 5010       Flower Blue       RAL 8012       Red Brown         RAL 5020       Ocean Blue       RAL 8014       Sepia Brown         RAL 6000       Patina Green       RAL 8017       Chocolate Brown         RAL 6002       Leaf Green       RAL 8019       Grey Brown         RAL 6003       Olive Green       RAL 8019       Grey Brown         RAL 6005       Moss green       RAL 9001       Cream White         RAL 6007       Bottle Green       RAL 9002       Hamlet         RAL 6011       Resada Green       RAL 9005       Jet Black         RAL 6020       Chrome Green       RAL 9006       Silver         RAL 7000       Squirrel Grey       RAL 9007       Grey Aluminium         RAL 7012       Basalt Grey       RAL 9010       Pure White         RAL 9011       Graphite Black         British Standard references         BS 00E53       Black       BS 12B21       Moorland Green         BS 04C39       Terracotta       BS 12B29       Juniper Green         BS 04E53       Poppy Red	RAL 5002	Ultramarine		RAL 7038	Agate Grey			
RAL 5009 Azure Blue	RAL 5003	Sargasso/Sapphire Blue		RAL 7040	Window Grey			
RAL 5010         Flower Blue         RAL 8012         Red Brown           RAL 5020         Ocean Blue         RAL 8014         Sepia Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6002         Leaf Green         RAL 8019         Grey Brown           RAL 6003         Olive Green         RAL 9001         Cream White           RAL 6005         Moss green         RAL 9002         Hamlet           RAL 6007         Bottle Green         RAL 9004         Signal Black           RAL 6011         Resada Green         RAL 9005         Jet Black           RAL 6020         Chrome Green         RAL 9006         Silver           RAL 7000         Squirrel Grey         RAL 9007         Grey Aluminium           RAL 7012         Basalt Grey         RAL 9010         Pure White           RAL 9011         Graphite Black         BS 12821         Moorland Green           BS 00E53         Black         BS 12827         Olive Green           BS 04C39         Terracotta         BS 12829         Juniper Green           BS 04E53         Poppy Red         BS 18B17         Albatross           BS 08B29         Vandyke Brown         BS 18B25         Merlin Grey </td <td>RAL 5007</td> <td>Brilliant Blue</td> <td></td> <td>RAL 8004</td> <td>Copper Brown</td> <td></td>	RAL 5007	Brilliant Blue		RAL 8004	Copper Brown			
RAL 5020         Ocean Blue         RAL 8014         Sepia Brown           RAL 6000         Patina Green         RAL 8017         Chocolate Brown           RAL 6002         Leaf Green         RAL 8019         Grey Brown           RAL 6003         Olive Green         RAL 9001         Cream White           RAL 6005         Moss green         RAL 9002         Hamlet           RAL 6007         Bottle Green         RAL 9004         Signal Black           RAL 6011         Resada Green         RAL 9005         Jet Black           RAL 6020         Chrome Green         RAL 9006         Silver           RAL 7000         Squirrel Grey         RAL 9007         Grey Aluminium           RAL 7012         Basalt Grey         RAL 9010         Pure White           RAL 9011         Graphite Black    **BS 00E53     Black  **BS 12B21     Moorland Green           BS 00E55         White         BS 12B27         Olive Green           BS 04C39         Terracotta         BS 12B29         Juniper Green           BS 04E53         Poppy Red         BS 14C37         Jade           BS 08C35         Bamboo         BS 18B17         Albatross           BS 10A05         Goosewing Grey         BS 18B29 <td>RAL 5009</td> <td>Azure Blue</td> <td></td> <td>RAL 8011</td> <td>Nut Brown</td> <td></td>	RAL 5009	Azure Blue		RAL 8011	Nut Brown			
RAL 6000       Patina Green       RAL 8017       Chocolate Brown         RAL 6002       Leaf Green       RAL 8019       Grey Brown         RAL 6003       Olive Green       RAL 9001       Cream White         RAL 6005       Moss green       RAL 9002       Hamlet         RAL 6007       Bottle Green       RAL 9004       Signal Black         RAL 6011       Resada Green       RAL 9005       Jet Black         RAL 6020       Chrome Green       RAL 9006       Silver         RAL 7000       Squirrel Grey       RAL 9007       Grey Aluminium         RAL 7012       Basalt Grey       RAL 9010       Pure White         RAL 9011       Graphite Black     BS 00E53  Black  BS 12B21  Moorland Green  BS 12B27  Olive Green  BS 12B29  Juniper Green  BS 04C39  Terracotta  BS 12B29  Juniper Green  BS 14C37  Jade  BS 08E39  Vandyke Brown  BS 18B17  Albatross  BS 08C35  Bamboo  BS 18B25  Merlin Grey  BS 10A05  Goosewing Grey  BS 10B19  Mushroom  BS 18B29  Grey  BS 10B19  Mushroom  BS 18C37  Wedgewood Blue  BS 10B23  Svelte Grey  BS 10B23  Svelte Grey  BS 10B23  RAL 9001  Cream White  RAL 9002  Hamlet  RAL 9004  Signal Black  RAL 9006  RAL 9005  Jet Black  RAL 9005  Jet Black  RAL 9006  RAL 9006  Silver  RAL 9007  RAL 9007  Grey Aluminium  RAL 9011  Grey Aluminium  RAL 9012  Hamlet  RAL	RAL 5010	Flower Blue		RAL 8012	Red Brown			
RAL 6002       Leaf Green       RAL 8019       Grey Brown         RAL 6003       Olive Green       RAL 9001       Cream White         RAL 6005       Moss green       RAL 9002       Hamlet         RAL 6007       Bottle Green       RAL 9004       Signal Black         RAL 6011       Resada Green       RAL 9005       Jet Black         RAL 6020       Chrome Green       RAL 9006       Silver         RAL 7000       Squirrel Grey       RAL 9010       Pure White         RAL 9011       Graphite Black     BS 12821  Moorland Green  BS 00E53  Black  BS 12B27  Olive Green  BS 12B29  Juniper Green  BS 12B29  Juniper Green  BS 14C37  Jade  BS 18B29  Wandyke Brown  BS 18B17  Albatross  BS 08B29  Vandyke Brown  BS 18B17  Albatross  BS 18B25  Merlin Grey  BS 10A05  Goosewing Grey  BS 18B29  Grey  BS 10B19  Mushroom  BS 18C37  Wedgewood Blue  BS 10B23  Svelte Grey  BS 10B23  Svelte Grey  BS 18C39  Ocean Blue	RAL 5020	Ocean Blue		RAL 8014	Sepia Brown			
RAL 6003       Olive Green       RAL 9001       Cream White         RAL 6005       Moss green       RAL 9002       Hamlet         RAL 6007       Bottle Green       RAL 9004       Signal Black         RAL 6011       Resada Green       RAL 9005       Jet Black         RAL 6020       Chrome Green       RAL 9006       Silver         RAL 7000       Squirrel Grey       RAL 9007       Grey Aluminium         RAL 7012       Basalt Grey       RAL 9010       Pure White         RAL 9011       Graphite Black         British Standard references     BS 12821  Moorland Green  BS 12827  Olive Green  BS 12829  Juniper Green  BS 12829  BS 12829  Juniper Green  BS 14C37  Jade  BS 18C37  Jade  BS 18B17  Albatross  BS 18B17  Albatross  BS 18B25  Merlin Grey  BS 10A05  Goosewing Grey  BS 18B29  Grey  BS 10B19  Mushroom  BS 18C37  Wedgewood Blue  BS 10B23  Svelte Grey  BS 10B23  Svelte Grey  BS 18C39  Ocean Blue	RAL 6000	Patina Green		RAL 8017	Chocolate Brown			
RAL 6005       Moss green       RAL 9002       Hamlet         RAL 6007       Bottle Green       RAL 9004       Signal Black         RAL 6011       Resada Green       RAL 9005       Jet Black         RAL 6020       Chrome Green       RAL 9006       Silver         RAL 7000       Squirrel Grey       RAL 9007       Grey Aluminium         RAL 7012       Basalt Grey       RAL 9010       Pure White         RAL 9011       Graphite Black         British Standard references         BS 00E53       Black       BS 12B21       Moorland Green         BS 00E55       White       BS 12B27       Olive Green         BS 04C39       Terracotta       BS 12B29       Juniper Green         BS 04E53       Poppy Red       BS 14C37       Jade         BS 08B29       Vandyke Brown       BS 18B17       Albatross         BS 08C35       Bamboo       BS 18B25       Merlin Grey         BS 10A05       Goosewing Grey       BS 18B29       Grey         BS 10B19       Mushroom       BS 18C37       Wedgewood Blue         BS 10B23       Svelte Grey       BS 18C39       Ocean Blue	RAL 6002	Leaf Green		RAL 8019	Grey Brown			
RAL 6007 Bottle Green RAL 9004 Signal Black RAL 6011 Resada Green RAL 9005 Jet Black RAL 6020 Chrome Green RAL 9006 Silver RAL 7000 Squirrel Grey RAL 9007 Grey Aluminium RAL 7012 Basalt Grey RAL 9010 Pure White RAL 9011 Graphite Black  British Standard references  BS 00E53 Black BS 12B21 Moorland Green BS 00E55 White BS 12B27 Olive Green BS 04C39 Terracotta BS 12B29 Juniper Green BS 04E53 Poppy Red BS 14C37 Jade BS 08B29 Vandyke Brown BS 18B17 Albatross BS 08B29 Vandyke Brown BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 18B29 Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue	RAL 6003	Olive Green		RAL 9001	Cream White			
RAL 6011         Resada Green         RAL 9005         Jet Black           RAL 6020         Chrome Green         RAL 9006         Silver           RAL 7000         Squirrel Grey         RAL 9007         Grey Aluminium           RAL 7012         Basalt Grey         RAL 9010         Pure White           RAL 9011         Graphite Black         Graphite Black    BS 00E53  BS 00E55  White  BS 12B21  Moorland Green  BS 12B27  Olive Green  BS 12B29  Juniper Green  BS 12B29  Juniper Green  BS 14C37  Jade  BS 14C37  Jade  BS 18B17  Albatross  BS 18B17  Albatross  BS 18B25  Merlin Grey  BS 18B29  Grey  BS 10A05  Goosewing Grey  BS 18B29  Grey  BS 18B29  Grey  BS 18B29  Grey  BS 10B19  Mushroom  BS 18C37  Wedgewood Blue  BS 10B23  Svelte Grey  BS 18C39  Ocean Blue	RAL 6005	Moss green		RAL 9002	Hamlet			
RAL 6020 Chrome Green         RAL 9006 Silver           RAL 7000 Squirrel Grey         RAL 9007 Grey Aluminium           RAL 7012 Basalt Grey         RAL 9010 Pure White           RAL 9011 Graphite Black         RAL 9011 Graphite Black    BS 00E53 Black  BS 12B21 Moorland Green  BS 12B27 Olive Green  BS 12B29 Juniper Green  BS 04C39 Terracotta  BS 12B29 Juniper Green  BS 04E53 Poppy Red  BS 14C37 Jade  BS 18B17 Albatross  BS 08C35 Bamboo  BS 18B17 Albatross  BS 18B25 Merlin Grey  BS 10A05 Goosewing Grey  BS 18B29 Grey  BS 10B19 Mushroom  BS 18C37 Wedgewood Blue  BS 10B23 Svelte Grey  BS 18C39 Ocean Blue	RAL 6007	Bottle Green		RAL 9004	Signal Black			
RAL 7000         Squirrel Grey         RAL 9007         Grey Aluminium           RAL 7012         Basalt Grey         RAL 9010         Pure White           RAL 9011         Graphite Black           British Standard references           BS 00E53         Black         BS 12B21         Moorland Green           BS 00E55         White         BS 12B27         Olive Green           BS 04C39         Terracotta         BS 12B29         Juniper Green           BS 04E53         Poppy Red         BS 14C37         Jade           BS 08B29         Vandyke Brown         BS 18B17         Albatross           BS 08C35         Bamboo         BS 18B25         Merlin Grey           BS 10A05         Goosewing Grey         BS 18B29         Grey           BS 10B19         Mushroom         BS 18C37         Wedgewood Blue           BS 10B23         Svelte Grey         BS 18C39         Ocean Blue	RAL 6011	Resada Green		RAL 9005	Jet Black			
RAL 7012 Basalt Grey  RAL 9010 Pure White RAL 9011 Graphite Black  British Standard references  BS 00E53 Black BS 12B21 Moorland Green BS 00E55 White BS 12B27 Olive Green BS 04C39 Terracotta BS 12B29 Juniper Green BS 04E53 Poppy Red BS 14C37 Jade BS 08B29 Vandyke Brown BS 18B17 Albatross BS 08C35 Bamboo BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 10B29 Ocean Blue	RAL 6020	Chrome Green		RAL 9006	Silver			
BS 00E53 Black BS 12B21 Moorland Green BS 00E55 White BS 12B27 Olive Green BS 04C39 Terracotta BS 12B29 Juniper Green BS 04E53 Poppy Red BS 14C37 Jade BS 08B29 Vandyke Brown BS 18B17 Albatross BS 08C35 Bamboo BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 18B29 Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue	RAL 7000	Squirrel Grey		RAL 9007	Grey Aluminium			
British Standard references           BS 00E53         Black         BS 12B21         Moorland Green           BS 00E55         White         BS 12B27         Olive Green           BS 04C39         Terracotta         BS 12B29         Juniper Green           BS 04E53         Poppy Red         BS 14C37         Jade           BS 08B29         Vandyke Brown         BS 18B17         Albatross           BS 08C35         Bamboo         BS 18B25         Merlin Grey           BS 10A05         Goosewing Grey         BS 18B29         Grey           BS 10B19         Mushroom         BS 18C37         Wedgewood Blue           BS 10B23         Svelte Grey         BS 18C39         Ocean Blue	RAL 7012	Basalt Grey		RAL 9010	Pure White			
BS 00E53 Black BS 00E55 White BS 12B27 Olive Green BS 04C39 Terracotta BS 12B29 Juniper Green BS 04E53 Poppy Red BS 14C37 Jade BS 08B29 Vandyke Brown BS 18B17 Albatross BS 08C35 Bamboo BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue				RAL 9011	Graphite Black			
BS 00E53 Black BS 00E55 White BS 12B27 Olive Green BS 04C39 Terracotta BS 12B29 Juniper Green BS 04E53 Poppy Red BS 14C37 Jade BS 08B29 Vandyke Brown BS 18B17 Albatross BS 08C35 Bamboo BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue		Bri	tish Standa	rd references				
BS 00E55 White BS 12B27 Olive Green BS 04C39 Terracotta BS 12B29 Juniper Green BS 04E53 Poppy Red BS 14C37 Jade BS 08B29 Vandyke Brown BS 18B17 Albatross BS 08C35 Bamboo BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 18B29 Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue	RS OOE53	Rlack		RS 12R21	Moorland Green			
BS 04C39         Terracotta         BS 12B29         Juniper Green           BS 04E53         Poppy Red         BS 14C37         Jade           BS 08B29         Vandyke Brown         BS 18B17         Albatross           BS 08C35         Bamboo         BS 18B25         Merlin Grey           BS 10A05         Goosewing Grey         BS 18B29         Grey           BS 10B19         Mushroom         BS 18C37         Wedgewood Blue           BS 10B23         Svelte Grey         BS 18C39         Ocean Blue		2.00.						
BS 04E53 Poppy Red BS 08B29 Vandyke Brown BS 18B17 Albatross BS 08C35 Bamboo BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue								
BS 08B29 Vandyke Brown BS 08C35 Bamboo BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue								
BS 08C35 Bamboo BS 18B25 Merlin Grey BS 10A05 Goosewing Grey BS 18B29 Grey BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue								
BS 10A05 Goosewing Grey BS 10B19 Mushroom BS 10B23 Svelte Grey BS 18B29 Grey BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue		· · · · · · · · · · · · · · · · · · ·						
BS 10B19 Mushroom BS 18C37 Wedgewood Blue BS 10B23 Svelte Grey BS 18C39 Ocean Blue		54555						
BS 10B23 Svelte Grey BS 18C39 Ocean Blue					_			
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The colours shown above are only printed samples, the real colours could slightly differ.



#### Drill-screws with injection moulded nylon head

The advantages of using fasteners with an integral coloured head are well proven in today's metal roofing & cladding markets where an external fastener is required.

The comprehensive nylon head programme of purpose designed drill-screws are available in carbon steel and austenitic stainless steel grades 304 / A2 or 316 / A4 (upon request).

Nylon head integral coloured head drill-screw fasteners are simply installed in one operation with a standard screwgun. Permanent colour matching is ensured without the problems associated with separate colour caps.

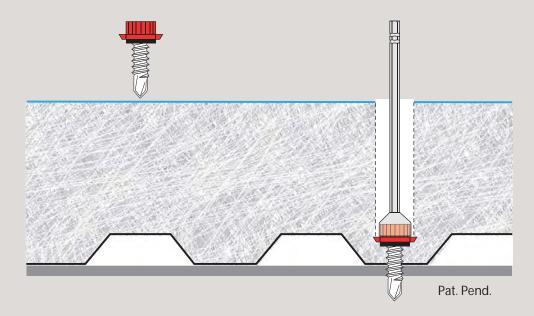
The nylon head fastener programme provides a durable UV-resistant colour match to the profiled colour sheet and greatly enhances the fasteners resistance to corrosion. This is due to the reinforced glass fibre polyamide composition with built-in UV-stabilisers.

Nylon head headed screws are moulded to suit 16, 19 or 29 mm washers.



# Nylon head with wings

Developed by PMJ to fix membrane faced insulated panels. The wings will cut through the membrane layer and the insulation to fasten the panel onto the substrate.

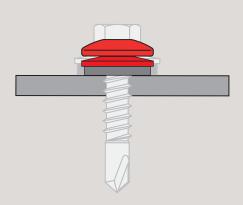


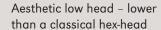


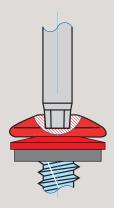
#### **Application** examples

## Aesthetic low profile carbon-steel drill-screws

The growth of our low profile headed range has been created by the market demanding a more aesthetically pleasing fastener, particularly in cladding applications, and providing an unobtrusive head style.

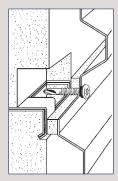






DS-Drive is a substantial improvement over the 6 lobe recess.

The conical form of the drive recess creates a mechanical magnetism that prevents the screw from falling-out of the drive bit.

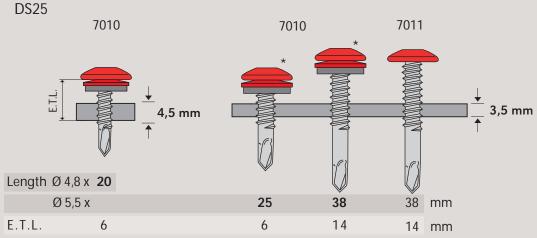


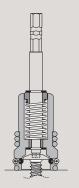


**7010 / 7011** DIBT approval Z-14.1-4 ETA-10/0199

low-profile-head drill-screws with DS-drive (DS25), drill-point № 2, for fastening to liner trays, cassettes, cold-rolled rails and purlins from 2 x 0,63 - 3,5 mm.



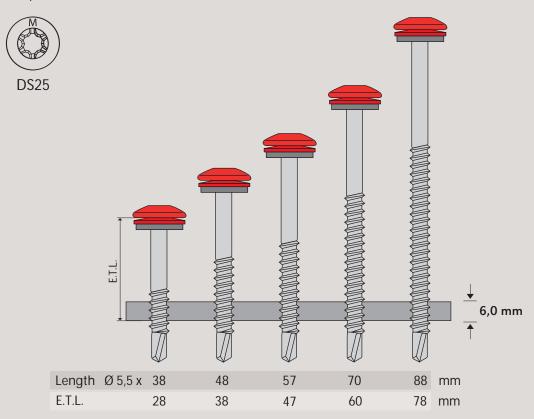




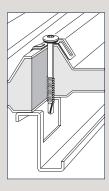
7970/21 low-profile-head screws setting tool



Low-profile-head drill-screws with DS-drive (DS25), drill-point N2 3, for fastening to cold-rolled rails and purlins from 1,5 – 6,0 mm.

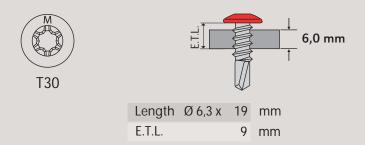


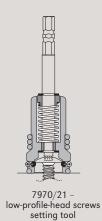
# Application examples



## 7026

Low-profile-head drill-screws with Torx-drive (T30), drill-point  $N_2$  3, for fastening to cold-rolled rails and purlins from 1,5 – 6,0 mm.



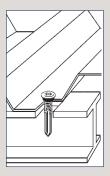


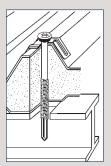


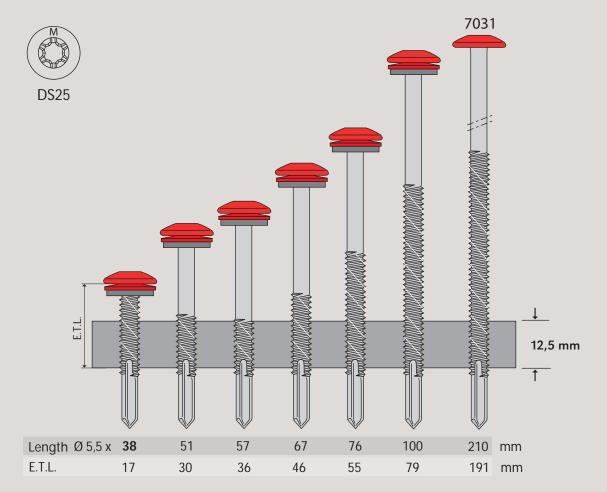
## 7030 / 7031

Low-profile-head drill-screws with DS-drive (DS25), drill-point № 5, for fastening to hot-rolled steel from 4,0 - 12,5 mm.

#### **Application** examples









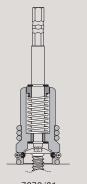
7040 / 7041 / 7049



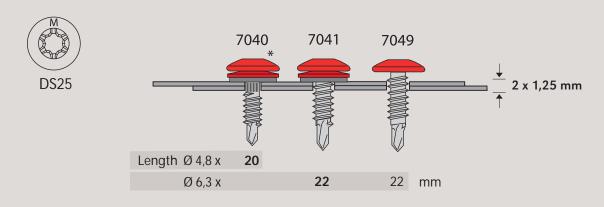
DIBT approval Z-14.1-4

ETA-10/0199

Low-profile-head drill-screws with DS-drive (DS25), reduced drill-point № 1 (7040 with a thread free zone), for stitching overlapping profiled sheets of maximum 2 x 1,25 mm. 7049 has a pilot point.



7970/21 low-profile-head screws

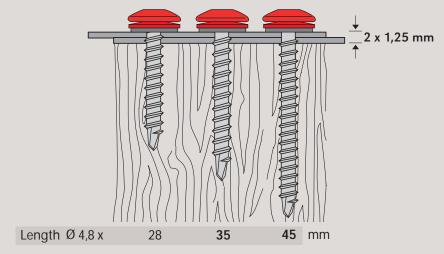




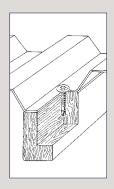
Low-profile-head drill-screws with DS-drive (DS25), reduced drill-point № 1, for fastening profiled sheets of maximum 2 x 1,25 mm to timber.



**DS25** 



**Application** examples

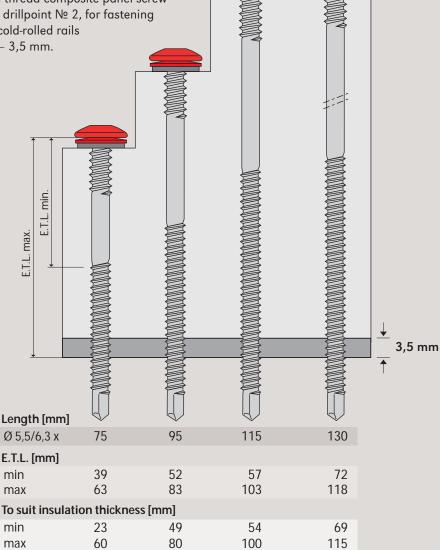


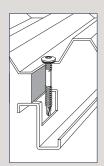


Low-profile-head high thread composite panel screw with DS-drive (DS25), drillpoint № 2, for fastening composite panels to cold-rolled rails and purlins from 1,2 - 3,5 mm.



**DS25** 









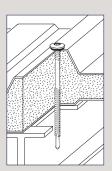
7970/21 – low-profile-head screws setting tool



Low-profile-head high thread composite panel screw with DS-drive (DS25), drill-point N 5, for fastening composite panels to hot-rolled steel from 4,0 - 12,5 mm.

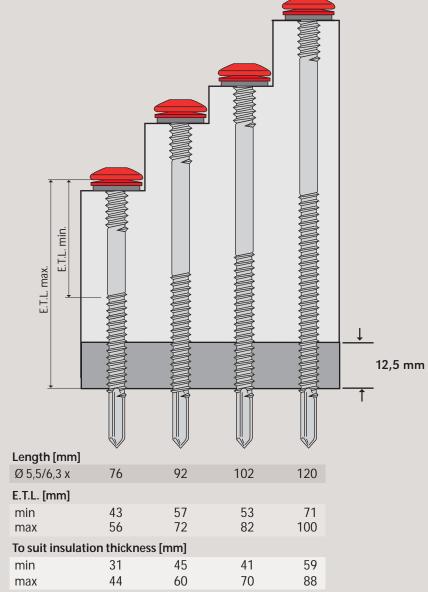
#### **Application** examples

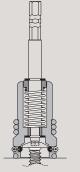






**DS25** 



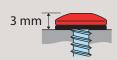


7970/21 – low-profile-head screws

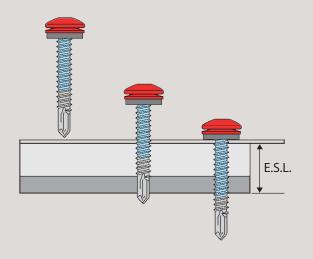


# Aesthetic low profile stainless steel drill-screws

bimetal austenitic stainless steel grade 304 / A2 drill-screws with DS drive.



# Application examples



#### **Application:**

The stainless part of the drill-screw must always penetrate through the steel structure that it is being fastened to, thereby ensuring that the stainless steel portion of the screw (E.S.L.) is fully engaged in the steel structure.



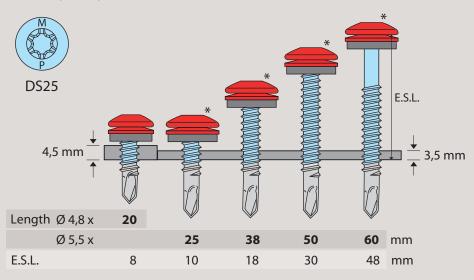
7110

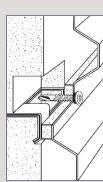


\* DIBT approval Z-14.1-4

ETA-10/0199

Low-profile-head **bimetal** stainless steel grade 304 / A2 drill-screws with DS-drive (DS25), drill-pointN2, for fastening to liner trays, cassettes, cold-rolled rails and purlins from  $2 \times 0.63 - 3.5$  mm.





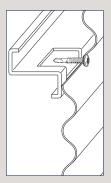


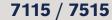
low-profile-head screws setting tool





#### **Application** examples







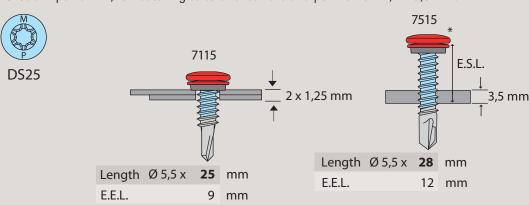
DIBT approval Z-14.1-4

ETA-10/0199

bimetal stainless steel grade 304 / A2 drill-screws with DS-drive (DS25),

7115: reduced drill-point № 1, for stitching overlapping profiled sinusoidal sheets together to a maximum of 2 x 1,25 mm.

7515: drill-point № 2, for fastening to cold-rolled rails and purlins from 1,2 – 3,5 mm.



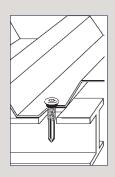
7120



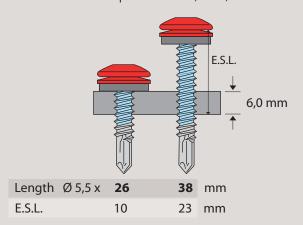
DIBT approval Z-14.1-4

ETA-10/0199

Low-profile-head bimetal stainless steel grade 304 / A2 drill-screws with DS-drive (DS25), drill-point № 3, for fastening to cold-rolled rails and purlins from 1,5 - 6,0 mm.



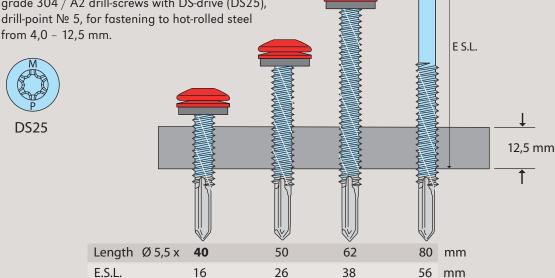




7130

Low-profile-head bimetal stainless steel grade 304 / A2 drill-screws with DS-drive (DS25), drill-point № 5, for fastening to hot-rolled steel







low-profile-head screws



#### 7140 / 7141 /7142



DIBT approval Z-14.1-4

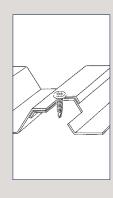
ETA-10/0199

3 mm

Low-profile-head bimetal stainless steel grade 304 / A2 drill-screws with DS-drive (DS25), reduced drill-point № 1 (7140 with a thread free zone), for stitching profiled sheets together to a maximum of 2 x 1,00 mm.

#### 7140 7141 7141 7141 7142 **DS25** 2 x 1,00 mm Length Ø 4,8 x 20 20 30 Ø 5,5 x 23 mm 25 Ø 6,3 x E.S.L. 8 13 8 18 8 mm

#### **Application** examples



#### 7160



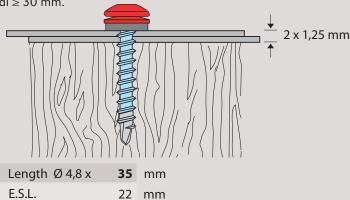
DIBT approval Z-14.1-4

ETA-10/0199

Low-profile-head bimetal stainless steel grade 304 / A2 drill-screws with DS-drive (DS25), reduced drill-point № 1 for fastening profiled sheets of maximum 2 x 1,25 mm to timber. Fastening depth according to approval  $\geq 30$  mm.





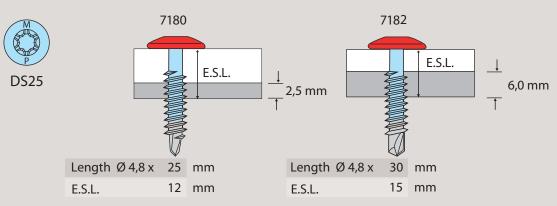


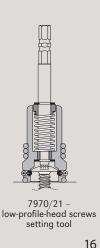


#### 7180 / 7182

Bimetal stainless steel grade 304 / A2 drill-screws with DS-drive (DS25), drill-point № 2. 7180: for fastening fibre boards to steel of 2,5 mm and drill-point № 2.

7182: for fastening fibre boards to steel of 6,0 mm and drill-point № 4.







#### Carbon steel low flat head drill-screws

# Application examples

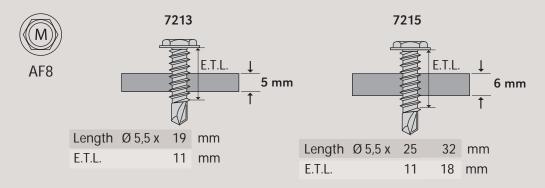
## 7213 / 7214 / 7215

Drill-screws with low-flat-hex-head (AF8), drill-point № 3, for fastening secret fix clips to cold rolled purlins from 1,5 – 5,0 mm. Article 7213 for fastening secret fix clips to timber.

7213: with drill-point No 3, drill capacity 1,5 - 5,0 mm

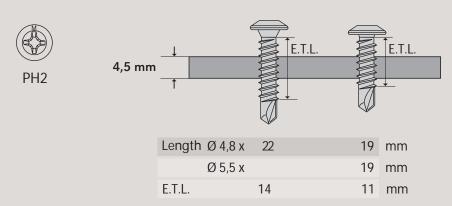
7214: with red. drill-point No 1, drill capacity max. 2 x 1,0 mm steelsheets

7215: with drill-point No 4, drill capacity 2 x 1,5 to max. 4 x 1,5 mm



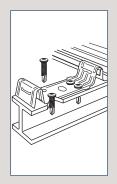
#### 7270

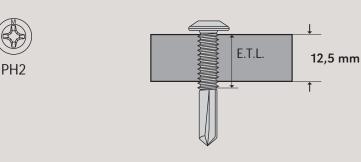
Wafer-head (PH2) drill-screws for fastening secret-fix brackets onto purlins of max. 4,5 mm.



#### 7337K

Wafer-head (PH2) drill-screws for fastening secret-fix brackets onto purlins of max. 12,5 mm.





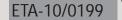


#### Carbon-steel hex head drill-screws

7310



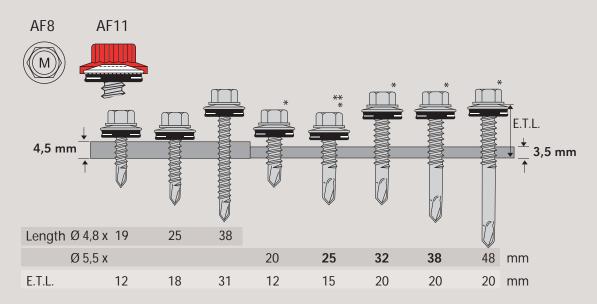
DIBT approval Z-14.1-4

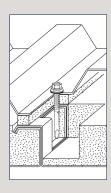


Application examples

Hex-head (AF8) drill-screws with drill-point № 2, for fastening to liner trays, cassettes, cold-rolled rails and purlins from  $2 \times 0.63 - 3.5 \text{ mm}$  (Ø 5.5) / - 4.5 mm (Ø 4.8).

\*\* 7310 in size  $\emptyset$  5,5 x 38 is also available with nylon head-wings for fastening membrane insulated panels, see page 8.





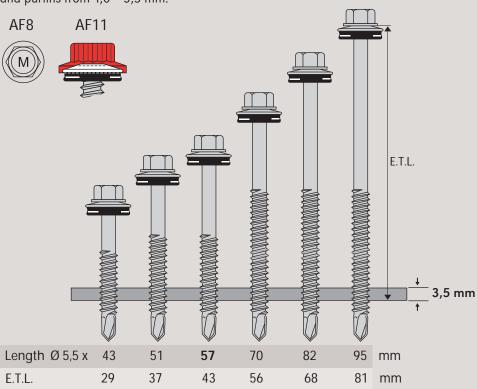
7320

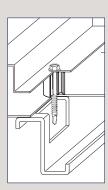


DIBT approval Z-14.1-4

ETA-10/0199

Hex-head (AF8) drill-screws with drill-point  $N_2$  2, for fastening to liner trays, cassettes, cold-rolled rails and purlins from 1,0 – 3,5 mm.







#### **Application** examples

7325

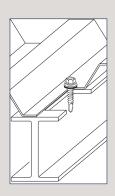


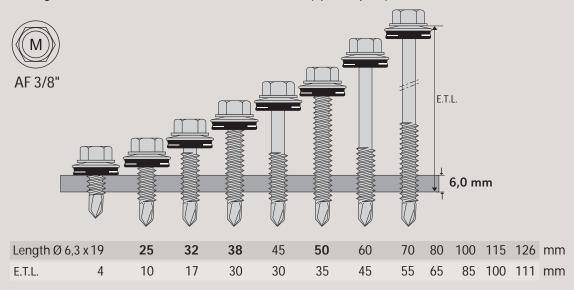
DIBT approval Z-14.1-4

ETA-10/0199

Hex-head (AF 3/8") drill-screws with drill-point № 3, for fastening to cold-rolled rails and purlins from 1,5 - 6,0 mm.

All lengths are also available with AF8 head as «7327» (upon request).





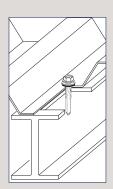
7330

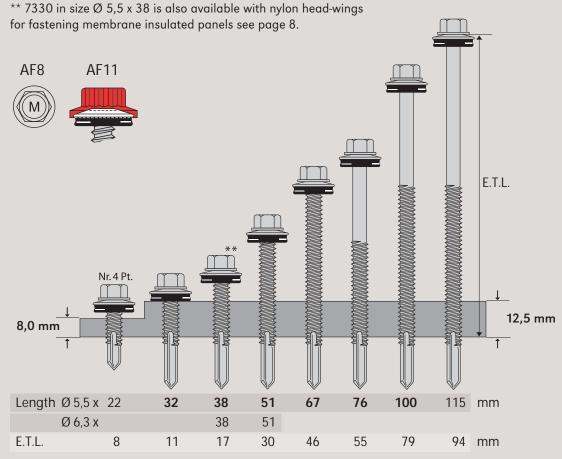


DIBT approval Z-14.1-4

ETA-10/0199

Hex-head (AF8) drill-screws with drill-point № 5, for fastening to hot-rolled steel from 4,0 – 12,5 mm.







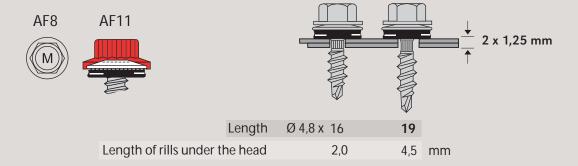


DIBT approval Z-14.1-4

ETA-10/0199

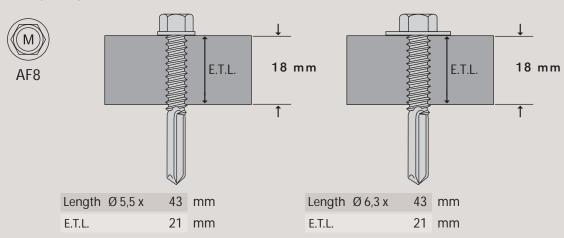
Hex-head (AF8) drill-screws with reduced drill-point № 1, with thread free zone (Ø 5,5 x 25 mm – without thread free zone), for stitching profiled sheets together to a maximum of  $2 \times 1,25$  mm.

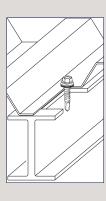
**Application** examples



#### 7336

Hex-washer-head (AF8) drill-screws with drill-point № 6, for fastening to hot rolled rails and purlins from 6,0 - 18,0 mm.





7339



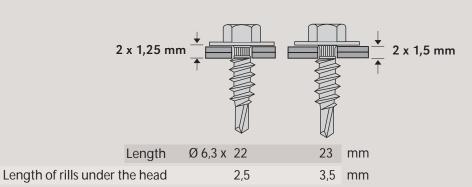
DIBT approval Z-14.1-4

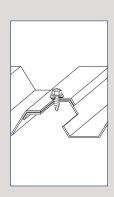
ETA-10/0199

Hex-washer-head (AF8) drill-screws with reduced drill-point № 1, with thread free zone, with large 15 mm flange for stitching profiled sheets together to a maximum of 2 x 1,25 mm and 2 x 1,5 mm.



AF8







# Application examples

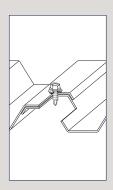
7340

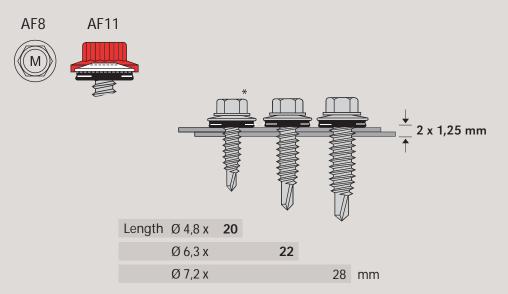


DIBT approval Z-14.1-4

ETA-10/0199

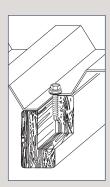
Hex-head (AF8) drill-screws with reduced drill-point N 1, for stitching overlapping profiled sheets together to a maximum of 2 x 1,25 mm.

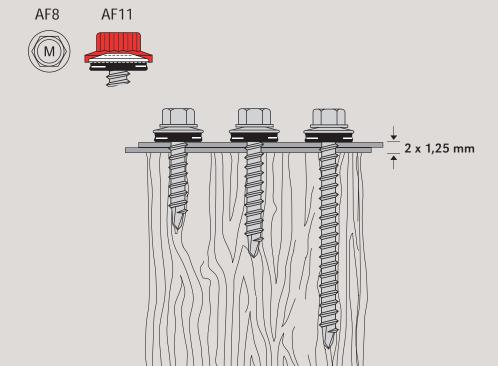




#### 7341

Hex-head (AF8) drill-screws with reduced drill-point  $N_2$  1, for fastening profiled sheets to a timber substrate.





35

60 mm

Length Ø 4,8 x

28





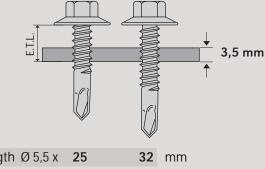
DIBT approval Z-14.1-4

ETA-10/0199

Hex-washer-head (AF8) drill-screws with large 15 mm flange and reduced drill-point № 2, for fastening to cold-rolled rails and purlins from 1,2 – 3,5 mm. Also available with EPDM sealing ring.



AF8



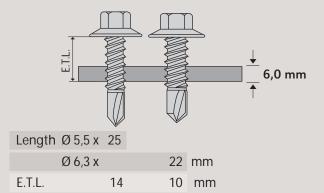
Length Ø 5,5 x	25	32	mm
E.T.L.	6	14	mm

#### 7343

Hex-washer-head (AF8) drill-screws with large 15 mm flange and drill-point New 3, for fastening to cold-rolled rails and purlins from 2,0 – 6,0 mm. Also available with EPDM sealing ring.



AF8







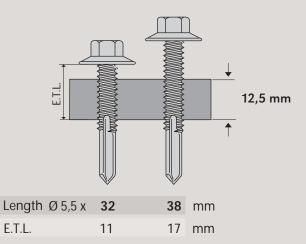
DIBT approval Z-14.1-4

ETA-10/0199

Hex-washer-head (AF8) drill-screws with large 15 mm flange and drill-point N2 5, for fastening to hot-rolled steel from 4,0 – 12,5 mm. Also available with EPDM sealing ring.

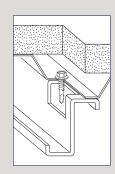


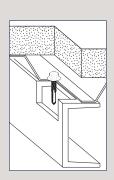
AF8













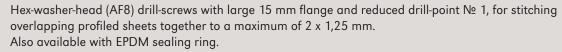
# **Application**

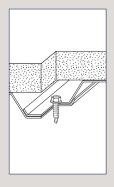
7346

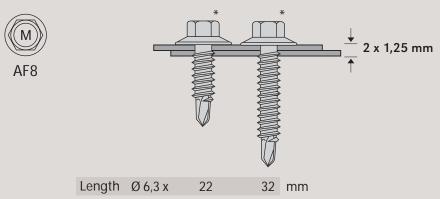
DIBT approval Z-14.1-4

ETA-10/0199

examples

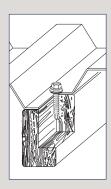


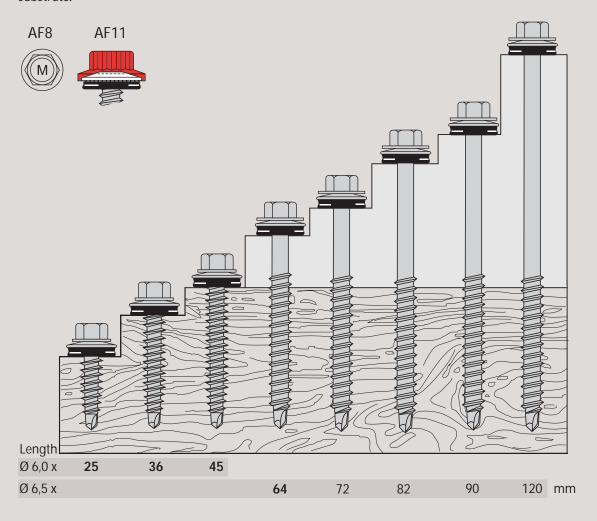




#### 7347

Hex-head (AF8) drill-screws with reduced drill-point № 1, for fastening profiled sheets to a timber substrate.

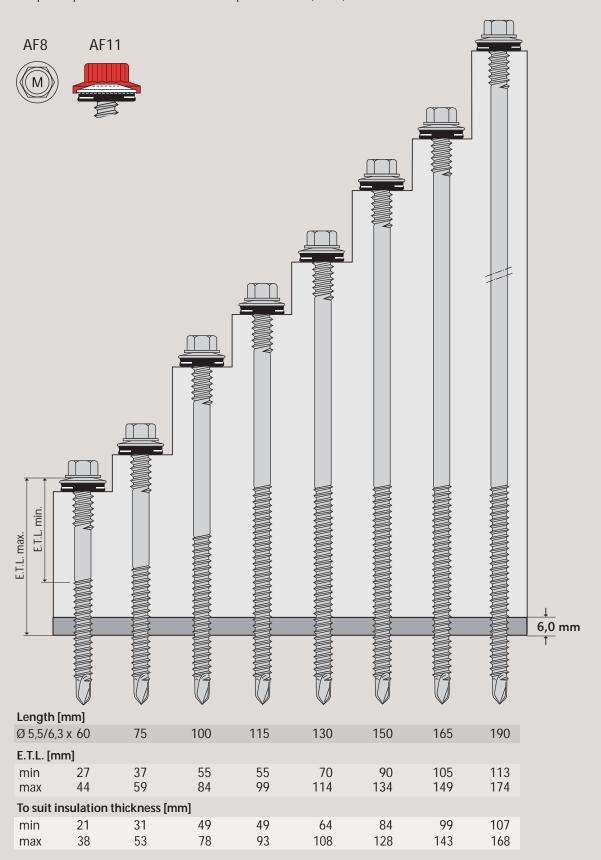




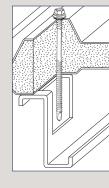


Hex-head (AF8) drill-screws with drill-point  $N_2$  3, with highthread, Ø 5,5/6,3 mm, for fastening composite panels to cold-rolled rails and purlins from 1,5 – 6,0 mm.

# Application examples



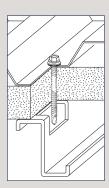


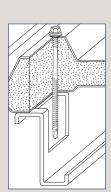




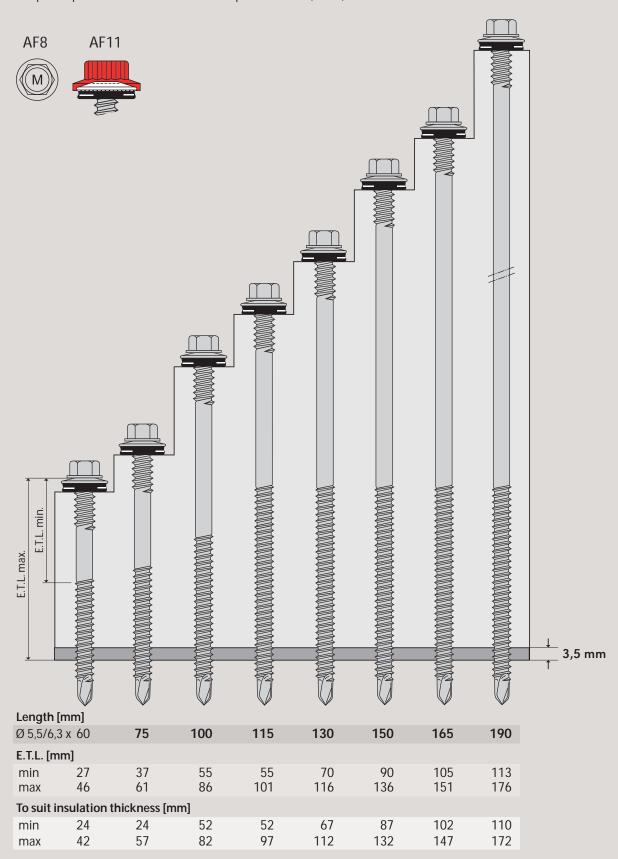
# Application examples

Hex-head (AF8) drill-screws with drill-point  $N_2$  2, with highthread, Ø 5,5/6,3 mm, for fastening composite panels to cold-rolled rails and purlins from 1,2 – 3,5 mm.





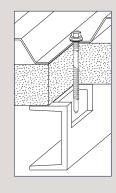
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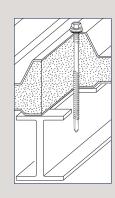


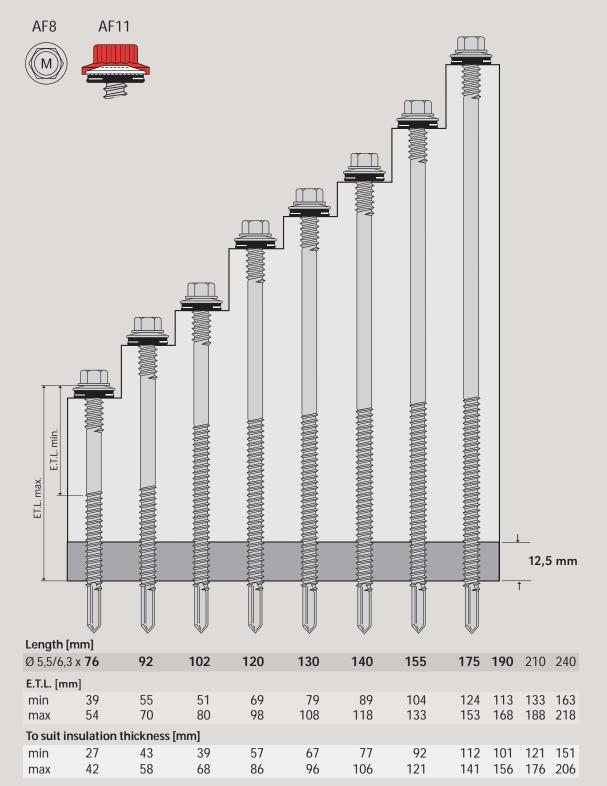


Hex-head (AF8) drill-screws with drill-point № 5, with highthread, Ø 5.5/6.3 mm, for fastening composite panels to hot-rolled steel from 4.0 - 12.5 mm.

# Application examples







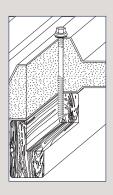
26

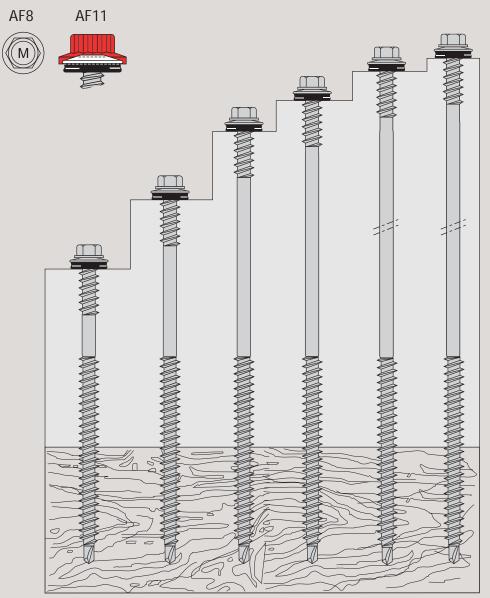


# Application examples

# **7380**

Hex-head (AF8) drill-screws with reduced drill-point No 1, with high-thread Ø 6,0/7,0 mm, for fastening composite panels to timber purlins.





Length [						
Ø 6,0/7,0	) x 90	110	130			
Ø 6,5/7,0	Эх			150	175	200
To suit in	nsulation th	ickness [mm]				
min	25	45	65	85	110	135
max	40	60	80	100	125	150



## **Carbon-steel self-tapping screws**

#### 7353

Self-tapping-hex-head (AF8) screws, **type A**, for fastening steel profiles to timber substrate or to cold-rolled rails and purlins up to a maximum of 3,0 mm.





Recommended drill-bit diameters for type A self-tapping screws						
Profile Thickness [mm]	Drill-bit Ø [mm]					
0,63 - 0,75	4,00					
0,88 - 1,25	4,50					
1,50 – 2,00	5,00					
2,00 - 3,00	5,70					
timber substrate	4,80					

#### 7373

Self-tapping-hex-head (AF8) screws, type B, for fastening steel profiles to cold-rolled steel over 3,0 mm. The first 5 mm's of the screw must always penetrate through the steel structure it is fastened to.







Recommended drill-bit diameters for type B self-tapping screws						
Profile Thickness [mm]	Drill-bit Ø [mm]					
1,25 - 1,50	5,00					
2,00 - 4,00	5,30					
4,00 - 7,00	5,50					
more than 7,00	5,70					

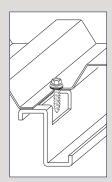
# Art. 7353 (Ø 6,5): Dimensions / Lengths

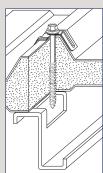
6,5 x 20 mm 6,5 x 25 mm 6,5 x 32 mm 6,5 x 38 mm 6,5 x 45 mm 6,5 x 50 mm 6,5 x 65 mm 6,5 x 75 mm 6,5 x 100 mm 6,5 x 115 mm 6,5 x 125 mm 6,5 x 150 mm 6,5 x 175 mm 6,5 x 200 mm

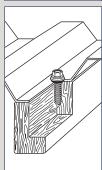
#### Art. 7373 (Ø 6,3): Dimensions / Lengths

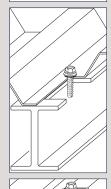
6,3 x 20 mm 6,3 x 25 mm 6,3 x 32 mm 6,3 x 38 mm 6,3 x 45 mm 6,3 x 50 mm 6,3 x 65 mm 6,3 x 75 mm 6,3 x 100 mm 6,3 x 115 mm 6,3 x 125 mm 6,3 x 150 mm 6,3 x 175 mm 6,3 x 200 mm

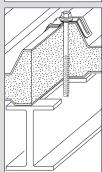
# Application examples











28

See page 56 for washer options

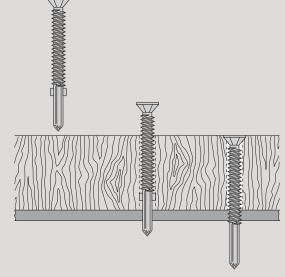


# Application examples

# **Carbon steel winged drill-screws**

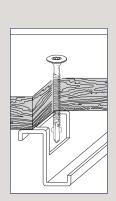
# **Product application**

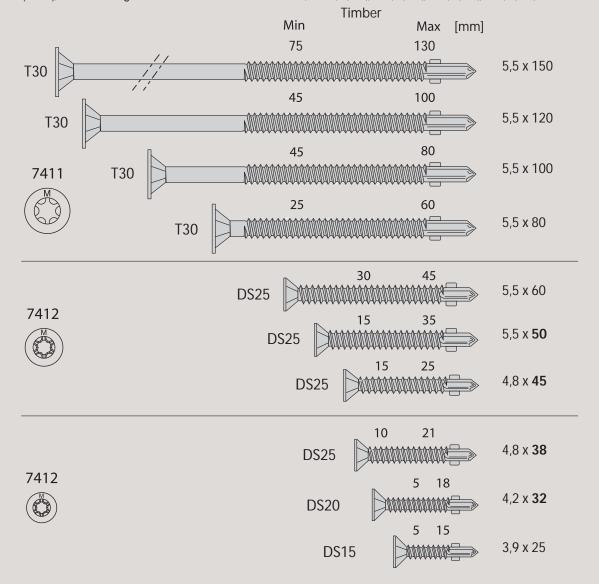
The wing-tipped-screw reams a hole through the timber. Upon penetration into the steel the wings break away.



## 7411 / 7412

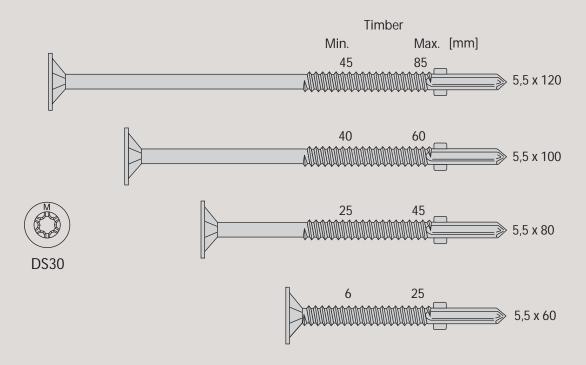
Drill-screws with ribbed-countersunk-head, and wings, with Torx 30 drive (7411) and with DS drive (7412), for fastening timber to steel substrate from 1.5 - 2.5(0.3.9); -3.5(0.4.2); -4.5(0.4.8); -5.0(0.5.5)mm.





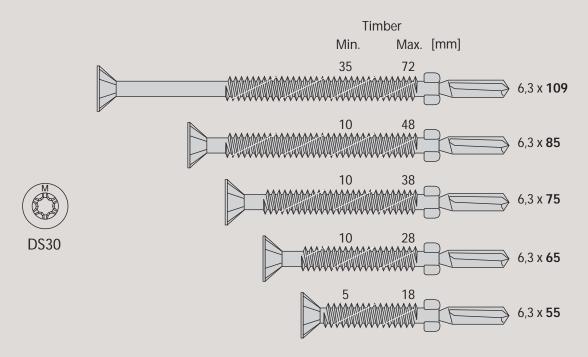


Drill-screw with ribbed-countersunk-head, and wings, for fastening timber to steel substrate from  $4.0\,-\,10.0\,$  mm.



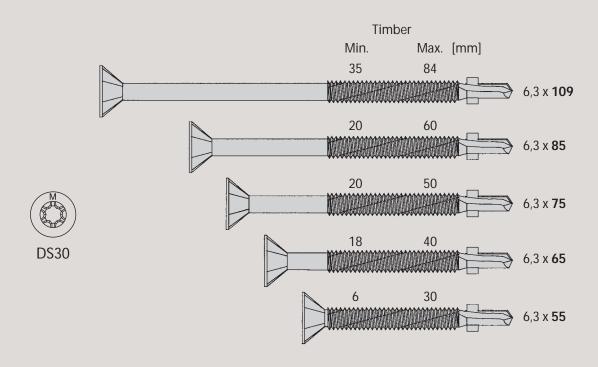
#### 7425

Drill-screws with ribbed-countersunk-head, with wings, and with DS drive, for fastening timber to steel substrate from 4.0 - 10.0 mm.



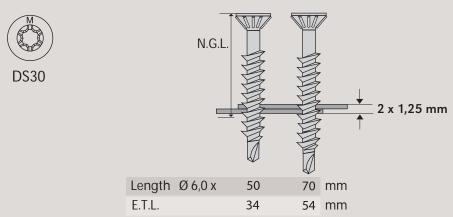


Drill-screw with ribbed-countersunk-head, with wings, and with DS drive, for fastening timber to steel substrate from 1.5-6.0~mm.



#### 7431

Drill-screw with countersunk-head, with DS-drive (DS30), drill-point  $N_2$  1, for fastening timber battens to composite panels.





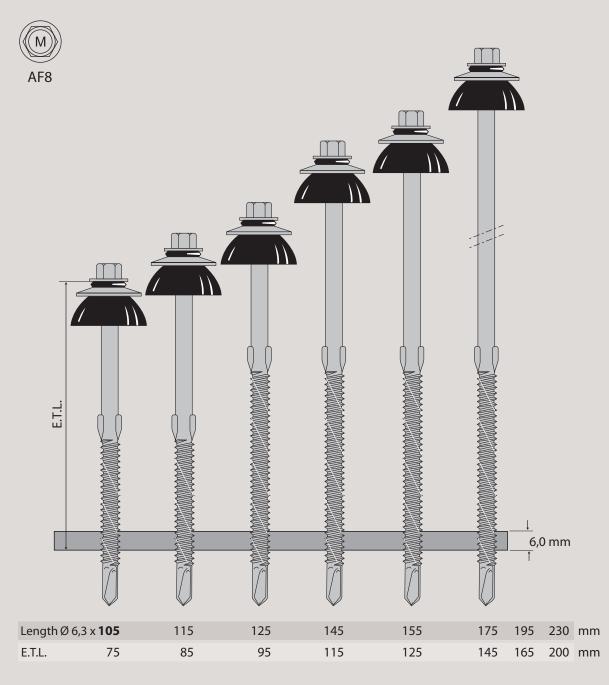
#### **7441 Dural 1000 Plus**

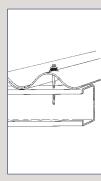
Hex-washer-head (AF8) drill-screws with drill-point  $N_2$  3, with wings, for fastening fibre-cement corrugated sheets to steel structures from 1,5 – 6,0 mm.

Recommended drill speed: 1600 - 2000 rpm.

7441 with the length 105 mm is also available with big wings as «**7442**» (upon request). 7441 with the length 115 mm is also available in **bimetal** as «**7442**» (upon request).

Application examples







# Application examples

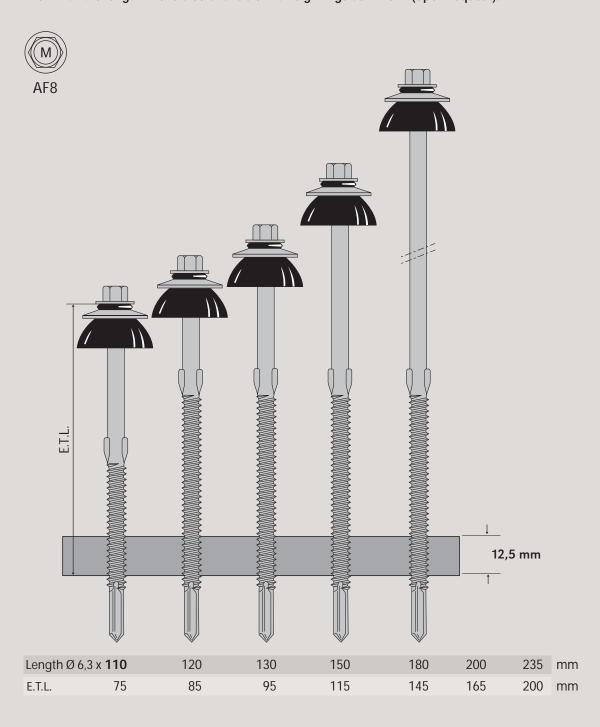
#### 7451 Dural 1000 Plus

Hex-washer-head (AF8) drill-screws with drill-point  $N_2$  5, with wings, for fastening fibre-cement corrugated sheets to steel structures from 4,0 – 12,5 mm.

Recommended drill speed: 1000 - 1600 rpm.

7451 with the length 110 is also available with big wings as «7452» (upon request).







# 7456 Dural 1000 Plus or Hot-dip galvanized



DIBT approval Z-31.4-174 DIBT approval Z-31.4-168

**Application** examples

Hex-washer-head (AF8) drill-screws with special drill-point, with wings, for fastening fibre-cement corrugated sheets to timber purlins.

Recommended drill speed: 800 - 1000 rpm.

Available in stainless steel grade 304 / A2 upon request. Available in stainless steel grade 316 / A4 upon request.



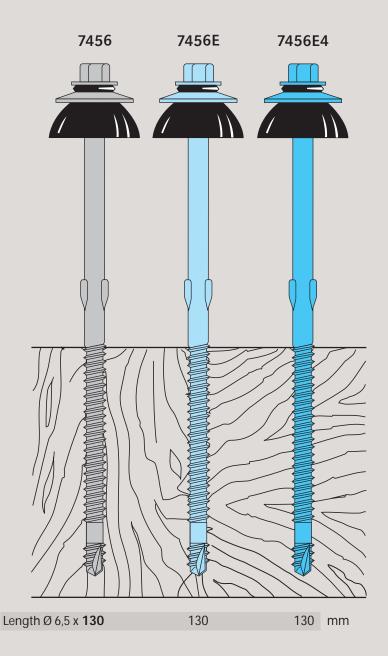


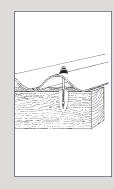


AF8

AF8

AF8







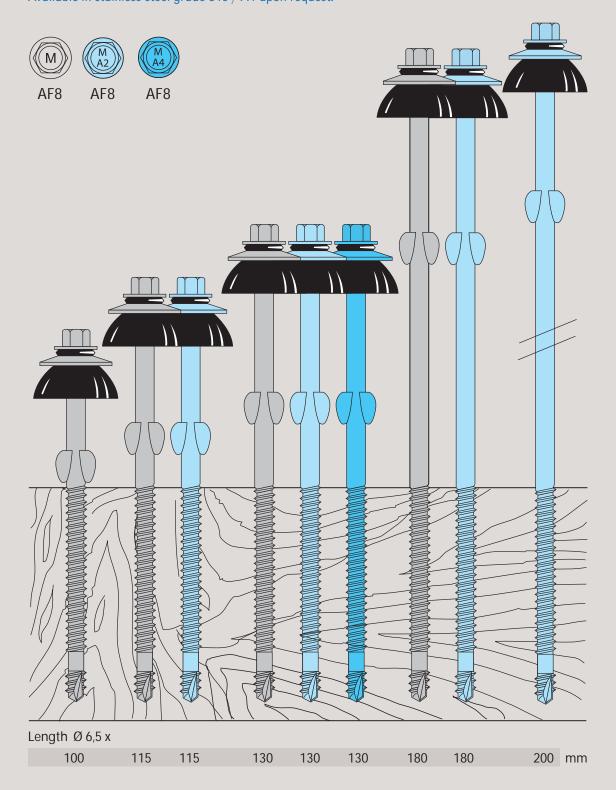
# Application examples

# 7457 Dural 1000 Plus or Hot-dip galvanized / 7457E / 7457E4

Hex-washer-head (AF8) drill-screws with special drill-point, with big wings, for fastening fibre-cement corrugated sheets to timber purlins.

Available in stainless steel grade  $304\ /\ A2$  upon request. Available in stainless steel grade  $316\ /\ A4$  upon request.



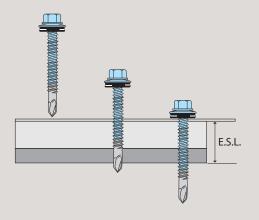




# Bimetal stainless steel drill-screws

Bi-metal austenitic stainless steel grade 304 / A2 and 316 / A4 drill-screws with a hardened drill-point. The most reliable solution for external applications.

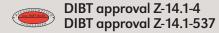
Application examples



### **Application:**

The stainless part of the **bimetal** drill-screw must always penetrate through the steel structure it is being fastened to, thereby ensuring that the stainless steel portion of the screw (E.S.L.) is fully engaged in the steel structure.

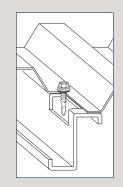
**7510** 

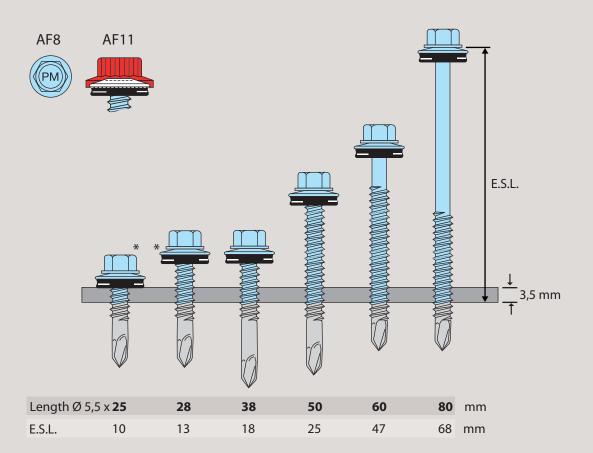


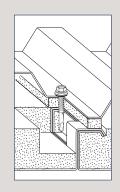
ETA-10/0199

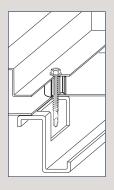
**Bimetal** stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with drill-point № 2 for fastening to liner trays, cassettes, cold-rolled rails and purlins from 2 x 0,63 – 3,5 mm.

\*\* 7510 in size Ø 5,5 x 38 is also available with nylon head-wings for fastening membrane insulated panels, see page 8.











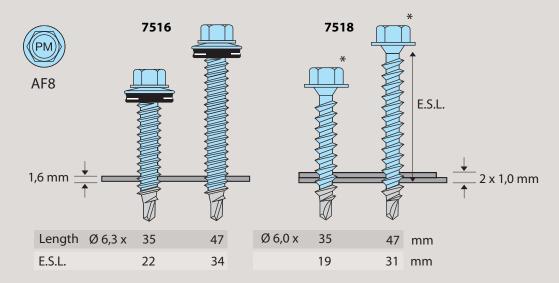
### **Application** examples

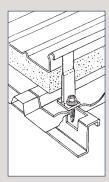
7516 / 7518



DIBT approval Z-14.1-519

Bimetal stainless-steel-hex-head (AF8) drill-screws grade 304 / A2, with reduced drill-point № 1 for fastening halter clips to cold rolled purlins from 1,2 - 1,6 mm (7516); and in steel decks from 0,63 - 1,00 mm or over liner sheets onto purlins up to 1,6 mm (7518).





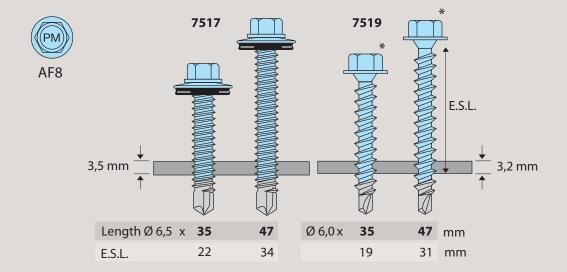
37

### 7517 / 7519



DIBT approval Z-14.1-519

bimetal stainless-steel-hex-head (AF8) drill-screws grade 304 / A2, with drill-point № 2, for fastening halter clips to cold-rolled purlins from 1,5 - 3,5 mm (7517); and in structural steel decks from 1,25 - 1,5 mm or over liner sheets onto purlins up to 3,2 mm (7519).





7520 / 7521

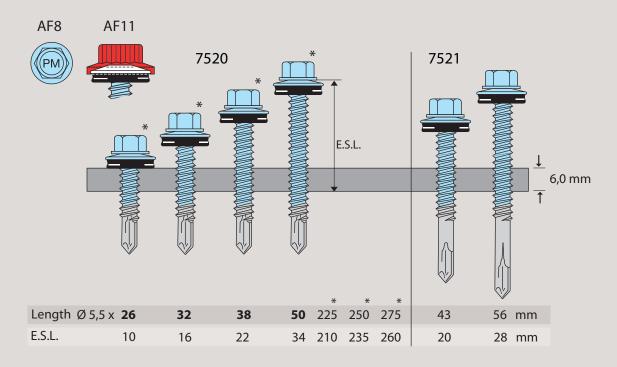


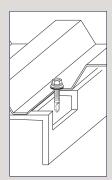
DIBT approval Z-14.1-4 ETA-10/0199

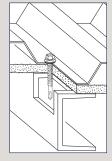
ETA-13/0182

Bimetal stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with drill-point № 3 for fastening to cold-rolled-rails and purlins from 1,5 - 6,0 mm.

**Application** examples





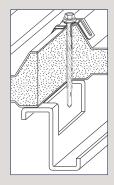


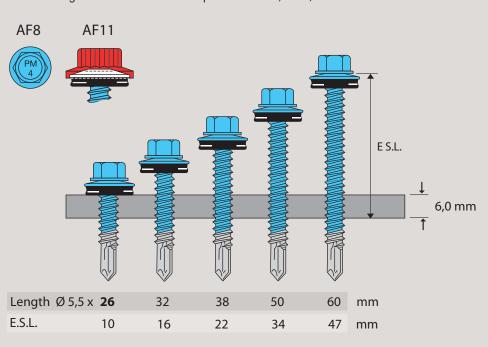
### 7520A4



DIBT approval Z-14.1-4

Bimetal stainless-steel-hex-head (AF8) grade 316 / A4 drill-screws with drill-point № 3 for fastening to cold-rolled-rails and purlins from 1,5 - 6,0 mm.



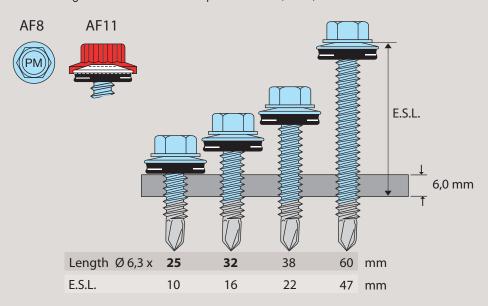






### DIBT approval Z-14.1-4

**Bimetal** stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with drill-point Nº 3 for fastening to cold-rolled-rails and purlins from 1.5 - 6.0 mm.



7530



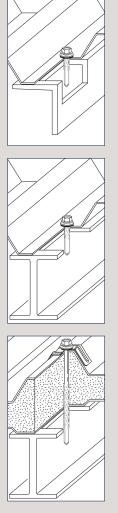
DIBT approval Z-14.1-4

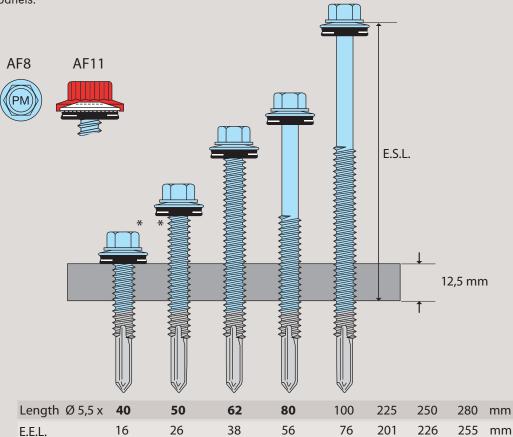
ETA-10/0199

ETA-13/0182

**Bimetal** stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with drill-point Nº 5 for fastening to hot-rolled steel from 4.0 - 12.5 mm.

\*\* 7530 in size  $\emptyset$  5,5 x 40 is also available with nylon head-wings for fastening membrane insulated panels.





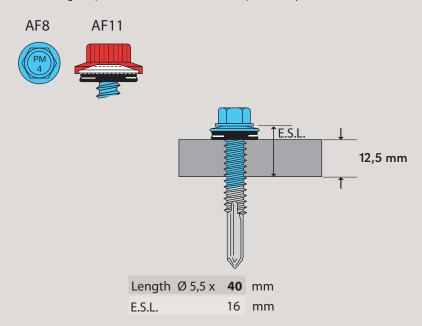


### 7530A4

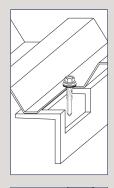


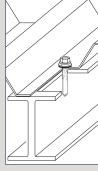
DIBT approval Z-14.1-4

Bimetal stainless-steel-hex-head (AF8) grade 316 / A4 drill-screws with drill-point № 5 for fastening to hot-rolled steel from 4,0 –12,5 mm. Other lengths (as for Articles «7530» in A2) – on request.



### **Application** examples



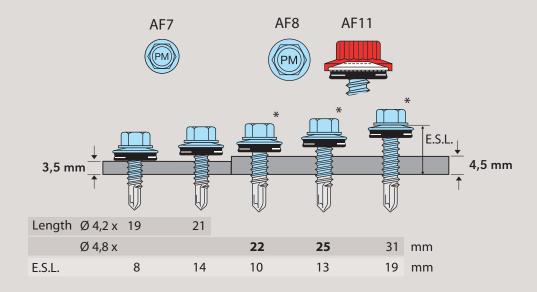


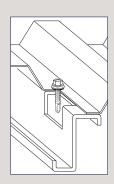
### **7540**



DIBT approval Z-14.1-537

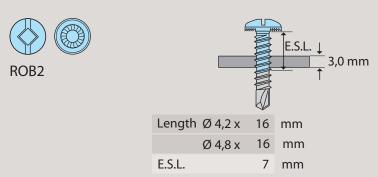
Bimetal stainless-steel-hex-head (AF7 / AF8) grade 304 / A2 drill-screws with drill-point № 3 for fastening to cold rolled rails and purlins from 1,2-3,5 mm (Ø 4,2) / -4,5 mm (Ø 4,8).





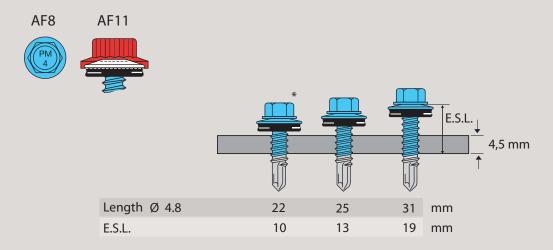


**Bimetal** stainless-steel-pan-head square-drive drill-screws, with drill-point N 2, for fastening to cold-rolled rails of 1,5 – 3,0 mm.



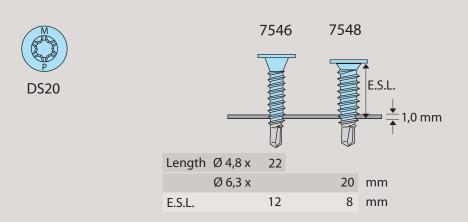
### **7544** DIBT approval Z-14.1-537

**Bimetal** stainless-steel-hex-head (AF8) grade 316 / A4 drill-screws with drill-point Nº 3 for fastening to cold rolled rails and purlins up to 4,5 mm.



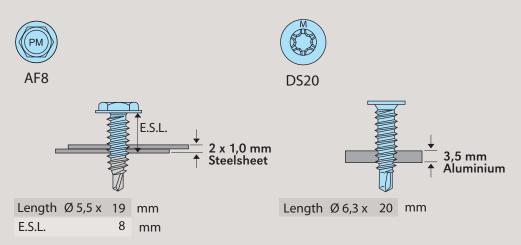
### 7546 / 7548

**Bimetal** stainless-steel flat-head screw grade 304 / A2 with reduced drill-point Nº 1 for fastening clips to cold-rolled rails and purlins of max. 2 x 0,63 mm or stainless steel of max. 1,0 mm.



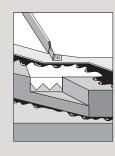


**Bimetal** stainless-steel-flat-hex-head grade 304 / A2 drillscrews, with reduced drill-point Nº 1, for fastening secret fix clips to thin steel or aluminium substrate.



# Application examples





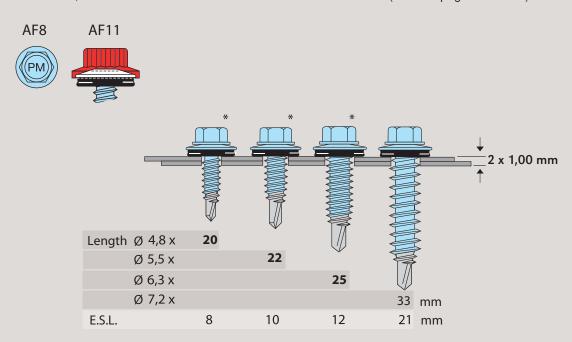
7550

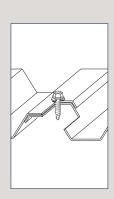


DIBT approval Z-14.1-4

ETA-10/0199

**Bimetal** stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with reduced drill-point No 1, for stitching overlapping profiled sheets together to a maximum of 2 x 1,00 mm. 7550 size 4,8 x 20 is also available in stainless steel A4 as «7550A4» (see next page for details)





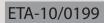


### **Application** examples

7553

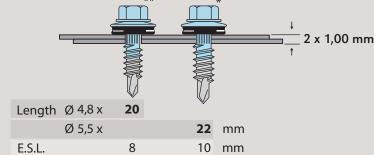


DIBT approval Z-14.1-4



Bimetal stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with reduced drill-point № 1, with thread free zone, for stitching overlapping profiled sheets together to a maximum of 2 x 1,00 mm.







**7550A4** DIBT approval Z-14.1-4

Bimetal stainless-steel-hex-head (AF8) grade 316 / A4 drill-screws with reduced drill-point № 1, for stitching overlapping profiled sheets together to a maximum of 2 x 1,00 mm. Other dimensions, as in «7550», available upon request.

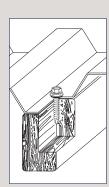


### 7561

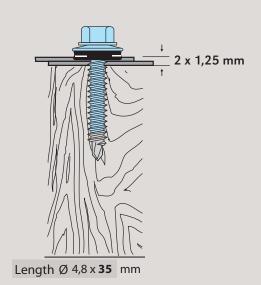


DIBT approval Z-14.1-4

Bimetal stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with reduced drill-point № 1, for fastening profiled sheets to timber. Fastening depth according to approval ≥ 35 mm.











**Bimetal** stainless 1.4301 (A2) hex head drillscrew, AF8 for swarfless fastening of corrugated steel sheets up to maximum 2 x 1,0 mm.

Application examples



7565



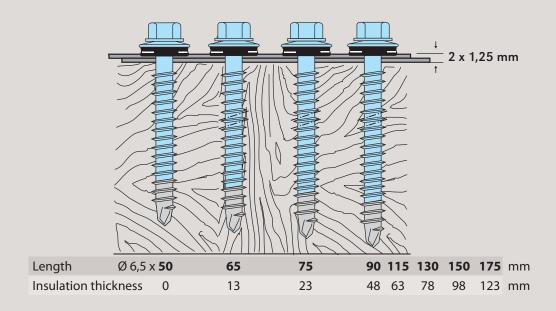
DIBT approval Z-14.1-4

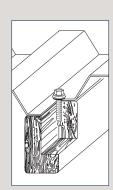
ETA-10/0199

ETA-13/0182

**Bimetal** stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with reduced drill-point No 1, for fastening profiled sheets to timber and composite panels. Fastening depth according to approval  $\geq 45$  mm.





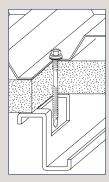


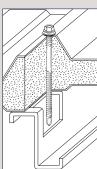


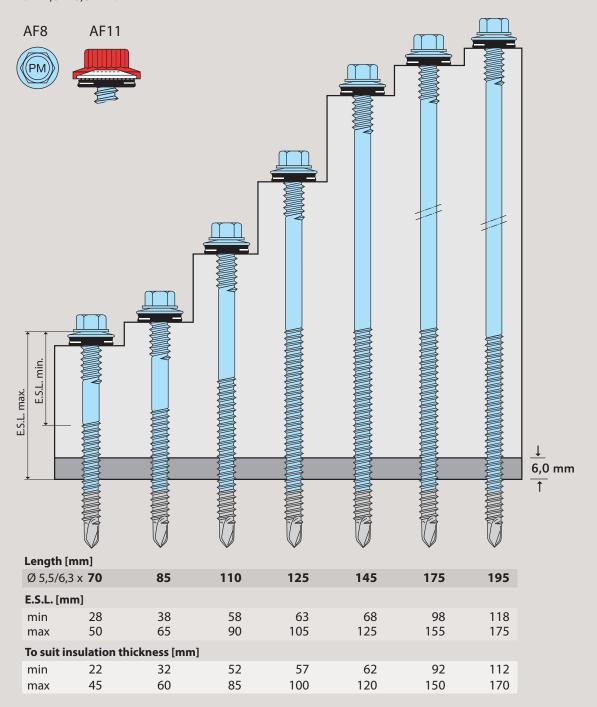
# Application examples

# **7570** ETA-13/0182

**Bimetal** stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with drill-point Nº 3, with high-thread, Ø 5.5/6.3 mm, for fastening composite panels to cold-rolled rails and purlins from 1.5 - 6.0 mm.







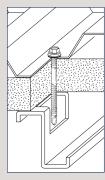


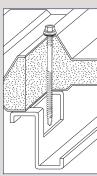
# ETA-13/0182

**Bimetal** stainless-steel-hex-head (AF8) grade / A2 drill-screws with drill-point Nº 2, with high-thread, Ø 5,5/6,3 mm, for fastening composite panels to cold-rolled rails and purlins from 1,2-3,5 mm.

# AF8 AF11 E.S.L. min. ESL max 3,5 mm Length [mm] Ø 5,5/6,3 x **70** E.S.L. [mm]

# Application examples



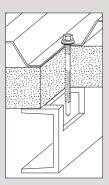


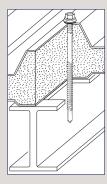
min

max



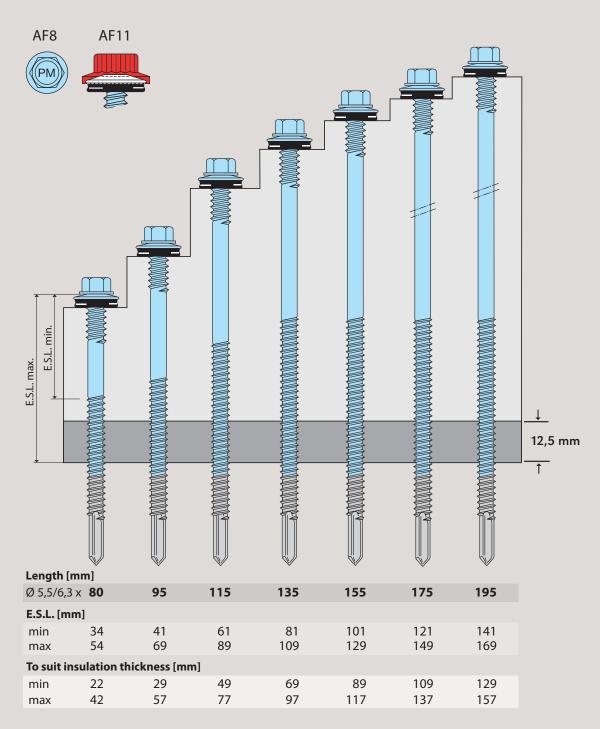
# Application examples





# **7575** ETA-13/0182

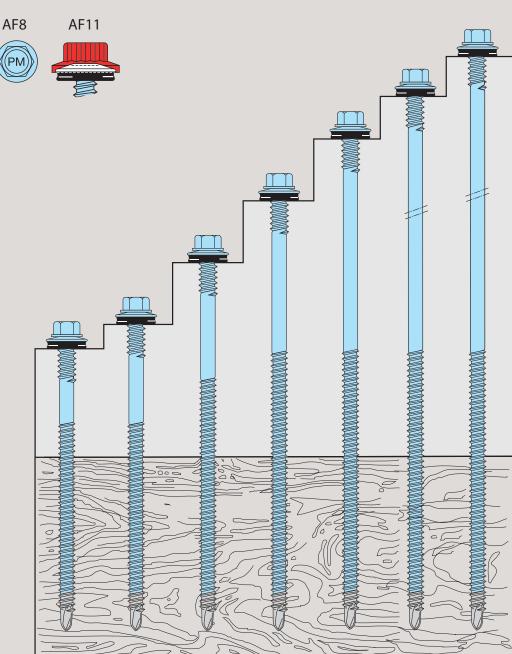
**Bimetal** stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with drill-point Nº 5, with high-thread, Ø 5,5/6,3 mm, for fastening composite panels to hot-rolled steel from 4,0-12,5 mm.





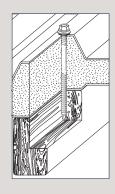
### **7580** ETA-13/0182

Bimetal stainless-steel-hex-head (AF8) grade 304 / A2 drill-screws with reduced drill-point№ 1, with high-thread, Ø 6,3/7,0 mm, for fastening composite panels to timber purlins. Fastening depth according to approval  $\geq 50$  mm.



### Length [mm] 220 240 260 Ø 6,3/7,0 x **102** 122 142 162 177 200 To suit insulation thickness [mm] 27 47 67 87 102 125 145 165 185 min 70 50 90 110 125 148 168 188 208 max

### **Application** examples



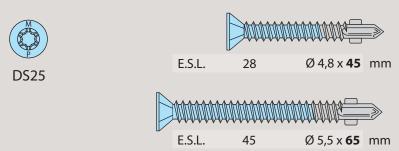


# Application examples

### 7591 / 7591 NW

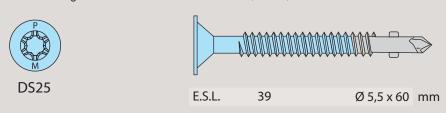
**Bimetal** stainless-steel grade 304 / A2 drill-screws ribbed countersunk-head with wings and DS-drive, for fastening timber to steel substrate from 1,5 to 4,5 mm (or 5,0 mm by the length of 65 mm).

Also available without wings as "NW".



### 7592

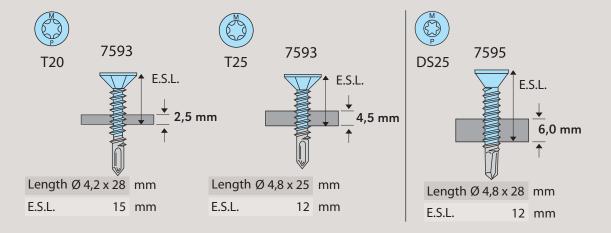
**Bimetal** stainless-steel, drill-screws (A2) ribbed countersunk-head with wings and DS-drive, for fastening timber to steel substrate from 1,5 to 2,0.



Technical details for 7591 / 7592						
Size [mm]	Drive recess	Drill capacity max. [mm]	E.S.L. [mm]	Timber thickness [mm]		
4,8 x 45	DS 25	1,5 – 4,5	28	18		
5,5 x 65	DS 25	1,5 - 5,0	45	35		
5,5 x 60	DS 25	1,5 - 2,0	39	30		

### 7593 / 7595

**Bimetal** stainless-steel grade 304 / A2 drill-screws countersunk-head with drill-point for fastening to cold-rolled rails and purlins from 1,5 – 6,0 mm.

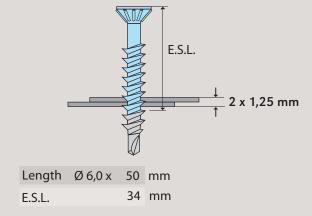




**Bimetal** stainless-steel-drill-screws grade 304 / A2 countersunk-head with drill-point No 1, DS-drive (DS25) for fastening timber battens to composite panels.

Application examples





### **Fully stainless steel screws**

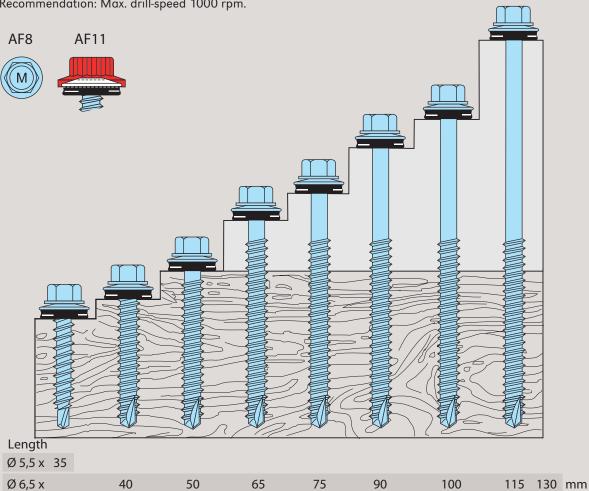
7641

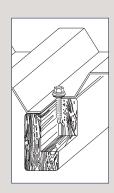


DIBT approval Z-14.1-537 DIBT approval Z-14.1-4

ETA-10/0199

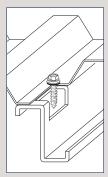
Drill-screws fully stainless-steel-hex-head (AF8) grade 304 / A2, with special drill-point № 1, for fastening profiled sheets to timber. Recommendation: Max. drill-speed 1000 rpm.

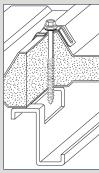


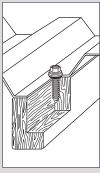




### **Application** examples







# Stainless steel self-tapping screws type A

**7653** Stainless steel A2 **7652** Stainless steel A4



DIBT approval Z-14.1-4 DIBT approval Z-14.1-537

ETA-10/0199

Self-tapping-hex-head (AF8) screws for fastening steel or aluminium profiles to timber substrate, or cold-rolled rails and purlins up to a maximum of 3,0 mm.

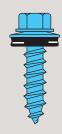
7653 - stainless steel grade 304 / A2.

7652 - stainless steel grade 316 / A4 (upon request).









DIBT approval Z-14.1-4

Recommended drill-bit diameters for type A self-tapping screws						
Profile Thickness [mm]	Drill-bit Ø [mm]					
0,63 - 0,75	4,00					
0,88 - 1,25	4,50					
1,50 – 2,00	5,00					
2,00 – 3,00	5,70					
timber substrate	4.80					

Art. 7652 / <b>7653</b> (Ø 6,5): Dimensions / Lengths					
AF 8	6,5 x 20 mm 6,5 x 25 mm 6,5 x 32 mm 6,5 x 38 mm 6,5 x 45 mm 6,5 x 50 mm 6,5 x 65 mm 6,5 x 75 mm 6,5 x 90 mm 6,5 x 115 mm 6,5 x 130 mm 6,5 x 150 mm 6,5 x 175 mm 6,5 x 200 mm				
AF 3/8"	6,5 x 220 mm 6,5 x 240 mm 6,5 x 260 mm				



**Application** examples

### Stainless steel self-tapping screws type B



**7673** Stainless steel A2 **7672** Stainless steel A4

DIBT approval Z-14.1-4

DIBT approval Z-14.1-537

ETA-13/0182

ETA-10/0199

Self-tapping-hex-head (AF8) screws for fastening steel or aluminium profiles to hot-rolled steel over 3,0 mm. The first 5 mm's of the screw must always penetrate through the steel structure it is fastened to.

7673 - stainless steel grade 304 / A2.

7672 - stainless steel grade 316 / A4 (upon request).











DIBT approval Z-14.1-4



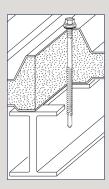
Recommended drill-bit diameters for type B self-tapping screws						
Profile Thickness [mm]	Drill-bit Ø [mm]					
1,25 – 1,50	5,00					
2,00 - 4,00	5,30					
4,00 - 7,00	5,50					
more than 7,00	5,70					

	2 / <b>7673</b> (Ø 6,3): sions / Lengths
AF 8	6,3 x 20 mm 6,3 x 25 mm 6,3 x 32 mm 6,3 x 38 mm 6,3 x 45 mm 6,3 x 50 mm 6,3 x 65 mm 6,3 x 75 mm 6,3 x 70 mm 6,3 x 100 mm 6,3 x 115 mm 6,3 x 130 mm 6,3 x 150 mm 6,3 x 175 mm 6,3 x 200 mm
AF 3/8"	6,3 x 220 mm 6,3 x 240 mm 6,3 x 260 mm

52 See page 56 for washer options

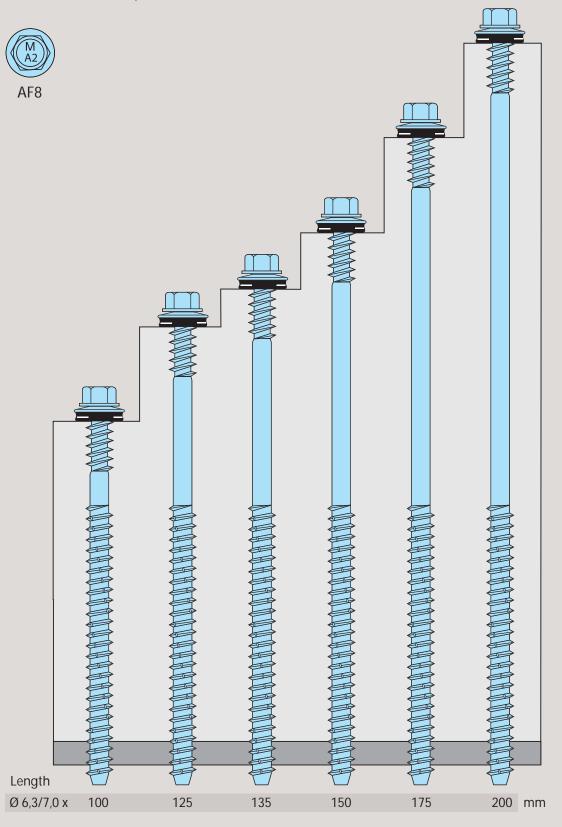


# Application examples



### **7673K**

Self-tapping-hex-head (AF8) screws, stainless-steel grade 304 (A2), **type B**, with high-thread,  $\emptyset$  6,3/7,0 mm, for fastening composite panels to hot-rolled steel over 3,0 mm.

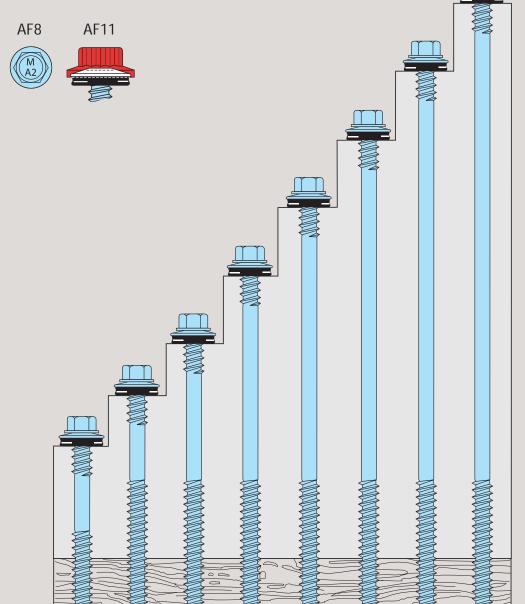




### 7680 ETA-13/0182

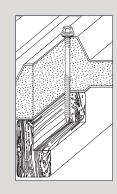
Hex-head (AF8) drill-screws, stainless-steel grade 304 / A2, with special drill-point No 1, with high-thread,  $\emptyset$  6,5/7,3 mm, for fastening composite panels to timber purlins. Recommended max. drill speed: 1000 rpm.

Fastening depth according to approval  $\geq 35$  mm.



Lengini	11111]							
Ø 6,5/7,2	2 x 75	90	102	125	145	165	177	200
To suit insulation thickness [mm]								
min		30	45	60	80	100	110	130
max	30	45	60	80	100	120	132	155

### **Application** examples





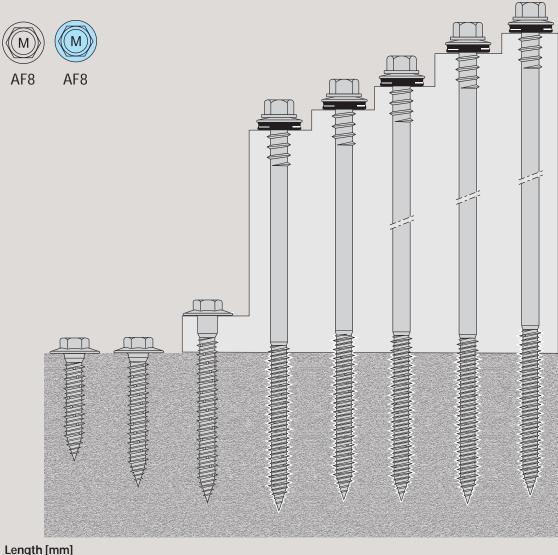
### **Concrete screws**

# Application examples

### 7890 / 7890E

Hex-head (AF8) concrete carbon steel screws with high-low concrete thread for fastening various components to concrete.

Available in stainless steel grade 304 / A2 as «**7890E**» upon request.



BASHL/219/SHC/4C362488C2/3D45/C54080/35	STOCK NOT CONTRACT TO THE VEHICLE NAME OF CONTRACT	NULL SHARKS COURSES AND SHOWN CHEST CONTINUE	C-472/-7490-8727-7894-1294-2940-787-79-4294-2940-9494-040	PUTCH PICE NO PICCONCENSION CONTRACTOR PORT CONTRACTOR	SCHOOL SERVICE CONTRACTOR	ENCLOSEDIA ILLEHAREN, ENCLOSECHORES SADAMARIS CII	*1528CWC239E2885362Y2588X17/9+0940C2FC190Y	
Length [mm]								
Ø 6,5/7,0 x 32	40	57	120	140	160	180	200	
To suit insulation thickness [mm]								
min		12	75	95	115	135	155	
max		27	90	110	130	150	170	

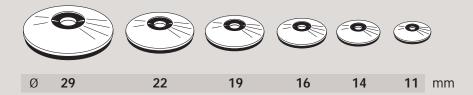
minimum 25 mm embedment in structural concrete / pre-drill Ø 5,0 or 5,5 mm according to the quality of the concrete



# **Sealing washers**

# 7711 / 7712 / 7715 / 7716

Sealing-washers with bonded EPDM seal, available in galvanized steel (7711), stainless steel grade 304 / A2 (7712), stainless steel grade 316 (A4) (7715) and aluminium (7716).



### 7714

Sealing-washers EPDM rings are available as 7714 for low-profile-head screws.







### **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



Millenium Stadium, Cardiff, Wales



Stadium: MK, Milton Keynes, England



Asia World Expo Hong Kong, PRC



Royal Opera House, Production Unit, London, England



National Centre for the Performing Arts, Beijing, PRC



Baltic Arena, Gdańsk, Poland



Hotel Inntel, near Amsterdam, The Netherland



Qatar Science and Technology Park, Doha, Qatar



E-on power station, near Rotterdam, The Netherland



Socar Tower, Baku, Azerbaijan

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### **Application fields**

Roofing & Cladding Rainscreen Cladding Flat Roofing Curtain Walling Drainage Pipes







