FIT JIG

INSTALLATION ANGLE JIG FOR HBS PLATE AND VGS SCREWS

PRECISION

The FIT JIG is designed to guide the screw as it is driven in, helping to maintain the correct installation angle. Installation is more precise and less dependent on the operator's experience. In standard applications, screws shorter than 300 mm can be installed without pre-drilling.

PRACTICALITY

The screw is inserted directly into the jig, which remains inside the connection after installation. The FIT JIG VG is compatible with countersunk head screws, such as VGS, and is designed for use with countersunk holes, like those in VGU washers. The FIT JIG HP, on the other hand, is compatible with HBS PLATE screws installed in cylindrical holes.

IMPACT AND CORROSION PROTECTION

The deformable polymer material reduces the peak torque generated when the screw head comes into contact with the metal, helping to prevent overtightening and stress concentrations.
The FIT JIG VG can also help prevent galvanic corrosion by acting as a barrier between the screw and the washer.



FIT JIG HP



FIT JIG VG



VIDEO
Scan the QR Code and watch the video on our YouTube channel



MATERIAL

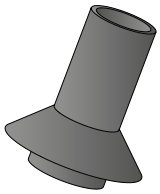
Made of polyurethane and EPDM. Both materials are UV-resistant and ensure long-term stability.

VERIFIED PERFORMANCE

Testing has shown that using the FIT JIG does not weaken the connection. For screws shorter than 11 3/4 in, the stay-in-place jig provides an alternative to pilot holes but does not eliminate the need for pre-drilling when working with hardwoods or under difficult installation conditions.

CODES AND DIMENSIONS

FIT JIG HP



CODE	$d_{HBS\ PLATE}$[(1)]		pcs
	[mm]	*[in]*	
FITJIGHP8	8	*0.32*	100
FITJIGHP10	10	*0.40*	50
FITJIGHP12	12	*0.48*	25

(1) Also applies to EVO and A4 versions, where available

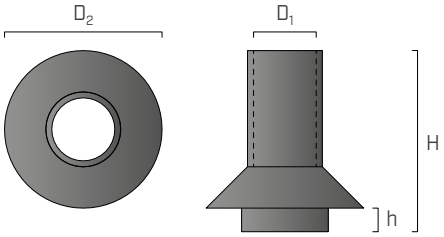
FIT JIG VG

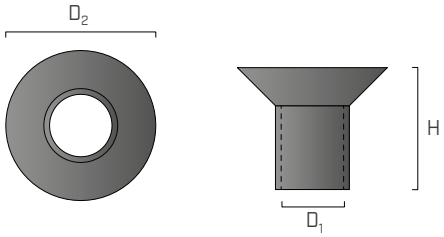


CODE	d_{VGS}[(1)]		d_{HBS}[(1)]		pcs
	[mm]	*[in]*	[mm]	*[in]*	
FITJIGVG9	9	*0.36*	8	*0.32*	25
FITJIGVG11	11	*0.44*	10	*0.40*	5
FITJIGVG13	13	*0.52*	12	*0.48*	5

(1) Also applies to EVO, A2 and A4 versions, where available

GEOMETRY





				FITJIGHP8		FITJIGHP10		FITJIGHP12		FITJIGVG9		FITJIGVG11		FITJIGVG13	
Internal diameter	D_1	[mm]	*[in]*	8	*0.32*	10	*0.40*	12	*0.48*	8.25	*0.32*	10,25	*0.40*	12,25	*0.48*
Increased diameter	D_2	[mm]	*[in]*	20	*0.79*	25	*0.98*	30	*1.18*	18,75	*0.74*	22,85	*0.90*	27,10	*1.07*
Global heigth	H	[mm]	*[in]*	23	*0.91*	28	*1.10*	33	*1.30*	16	*0.62*	19,5	*0.77*	23	*0.91*
Base heigth	h	[mm]	*[in]*	3	*0.12*	3	*0.12*	3	*0.12*	-	-	-	-	-	-

RELATED PRODUCTS



VGU



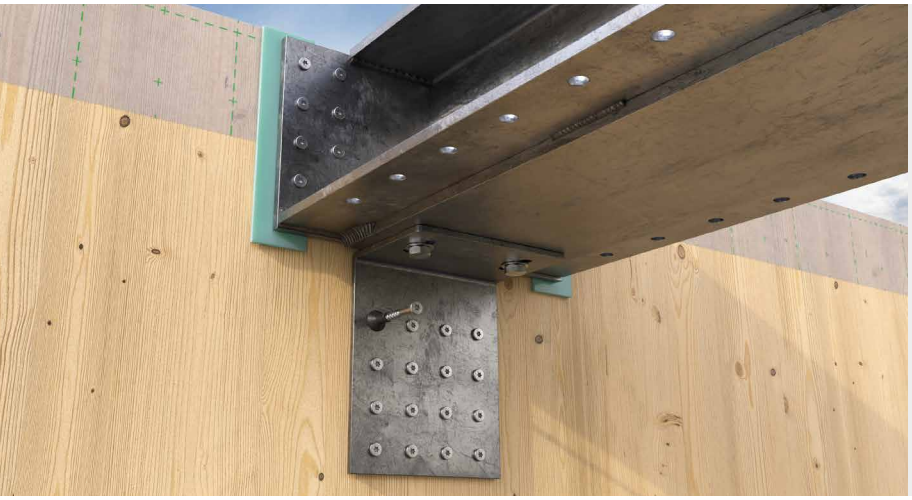
HUS



TORQUE LIMITER



JIG VGU



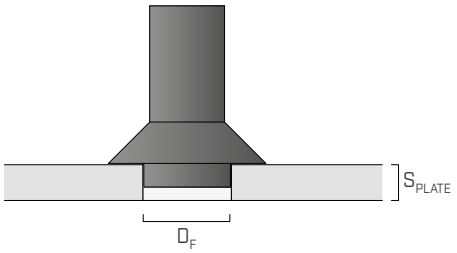
ENHANCED SAFETY IN CRITICAL CONNECTIONS

Using the FIT JIG in more complex connections allows designers to ensure that the installation conditions specified in the design are replicated on site. Controlling the screw installation angle and minimising the risk of overtorque help limit unexpected stresses and reduce the likelihood of damage and premature failure.

INSTALLATION ON PLATES

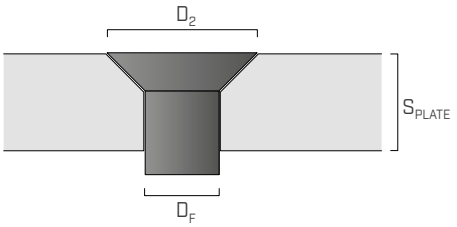
FIT JIG HP - 90° insertion | cylindrical hole

CODE	D_F		$S_{PLATE,min}$	
	[mm]	*[in]*	[mm]	*[in]*
FITJIGHP8	11	*7/16*	3	*0.12*
FITJIGHP10	13	*1/2*	3	*0.12*
FITJIGHP12	14	*9/16*	3	*0.12*



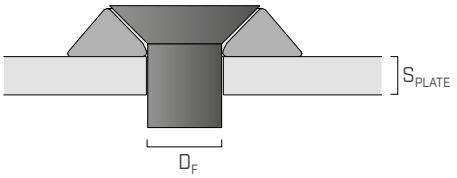
FIT JIG VG - 90° insertion | countersunk hole

CODE	$D_{F,min}$		$D_{2,min}$		$S_{PLATE,min}$	
	[mm]	*[in]*	[mm]	*[in]*	[mm]	*[in]*
FITJIGHVG9	9,5	*3/8*	19	*3/4*	12	*31/64*
FITJIGHVG11	11,5	*29/64*	23	*29/32*	16	*5/8*
FITJIGHVG13	13,5	*17/32*	27	*1*	20	*13/16*



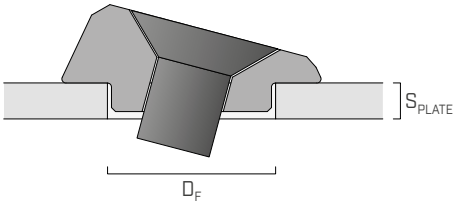
FIT JIG VG - 90° insertion with HUS | cylindrical hole

CODE	$D_{F,min}$		$S_{PLATE,min}$	
	[mm]	*[in]*	[mm]	*[in]*
FITJIGVG9	9,5	*3/8*	8	*0.32*
FITJIGVG11	11,5	*29/64*	10	*0.40*
FITJIGVG13	13,5	*17/32*	14	*9/16*



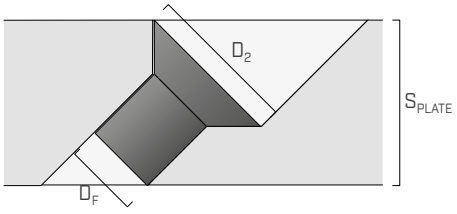
FIT JIG VG - 90° insertion with HUS 15° | cylindrical hole

CODE	D_F		$S_{PLATE,min}$	
	[mm]	*[in]*	[mm]	*[in]*
FITJIGVG9	20 ÷ 22	*25/32 ÷ 7/8*	6	*1/4*



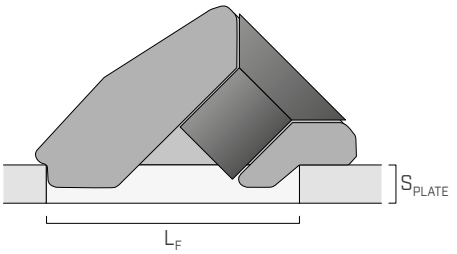
FIT JIG VG - 45° insertion | countersunk hole

CODE	$D_{F,min}$		$D_{2,min}$		$S_{PLATE,min}$	
	[mm]	*[in]*	[mm]	*[in]*	[mm]	*[in]*
FITJIGVG9	9,5	*3/8*	19	*3/4*	15	*5/8*
FITJIGVG11	11,5	*29/64*	23	*29/32*	20	*13/16*
FITJIGVG13	13,5	*17/32*	27	*1*	25	*1*

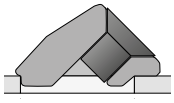
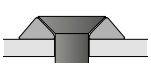
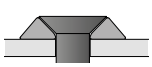


FIT JIG VG - 45° insertion | slotted hole

CODE	L_F		$S_{PLATE,min}$	
	[mm]	*[in]*	[mm]	*[in]*
FITJIGVG9	33 ÷ 34	*1.299 ÷ 1.339*	3 ÷ 12	*1/8 ÷ 1/2*
FITJIGVG11	41 ÷ 42	*1.614 ÷ 1.654*	4 ÷ 15	*3/16 ÷ 9/16*
FITJIGVG13	49 ÷ 50	*1.929 ÷ 1.969*	5 ÷ 15	*3/16 ÷ 9/16*



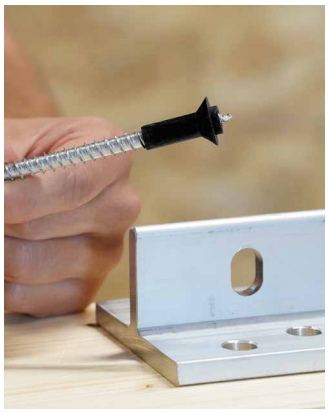
FIT JIG VG - COMPATIBILITY WITH SCREWS AND WASHERS[1]

SCREWS	VGS/VGS EVO/VGS A4					HBS/HBS EVO/SCI A2			
									
	D_{VGS}		VGU	HUS	HUS 15°	D_{HBS}		HUS	HUS 15°
	[mm]	*[in]*				[mm]	*[in]*		
FITJIGVG9	**Ø9**	*0.36*	VGU945	HUS10	HUS815	**Ø8**	*0.32*	HUS8	HUS815
FITJIGVG11	**Ø11**	*0.44*	VGU1145	HUS12	-	**Ø10**	*0.40*	HUS10	-
FITJIGVG13	**Ø13**	*0.52*	VGU1345	-	-	**Ø12**	*0.48*	HUS12	-

[1] Also applies to EVO and A4 versions, where available

INSTALLATION

INSTALLATION OF HBS PLATE SCREWS AT 90°



Insert the jig onto the screw until the tip protrudes.



Position the screw with the jig in the hole.



Continue driving the screw until it comes into contact with the plate.



If necessary, remove any remaining jig material around the screw and dispose of it.

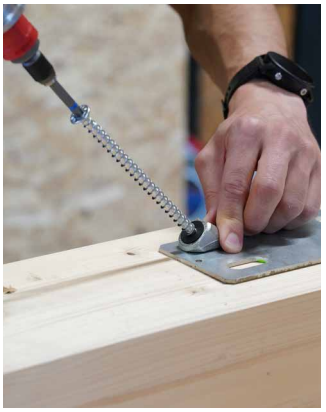
INSTALLATION OF VGS SCREWS AT 45° WITH VGU



Insert the jig into the screw installation hole.



Insert the screw into the jig until the tip protrudes.



Continue driving the screw until it is flush with the outer surface of the FIT JIG.

ON SITE, WATER CHANGES THE RULES

Rain, standing water and unprotected details can alter the conditions defined at the design stage. With this Smartbook, we have translated on-site experience into technical criteria and workable solutions.
Our experience is in your hands.
Available at www.rothoblaas.com

