XYLOFON WASHER

SEPARATING WASHER FOR TIMBER SCREW AND WHT

ACOUSTIC PERFORMANCE

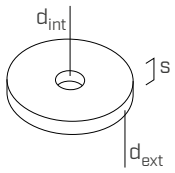
It improves soundproofing by decoupling of timber-to-timber joints made with screws and WHT.

STATICS

The washer increases the rope effect in the connection, thus improving the static performance of the detail.

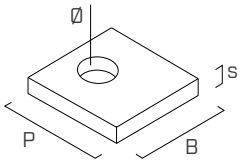
CODES AND DIMENSIONS

SEPARATING WASHER FOR SCREWS



CODE	d_{SCREW}	d_{ext} [mm]	d_{int} [mm]	s [mm]	*d_{ext} [in]*	*d_{int} [in]*	*s [in]*	pcs
XYLW803811	Ø8 - Ø10 *5/16 - 3/8*	38	11	6,0	*1 1/2*	*7/16*	*1/4*	50

SEPARATING WASHER FOR WHT



CODE	WHT	Ø [mm]	P [mm]	B [mm]	s [mm]	*Ø [in]*	*P [in]*	*B [in]*	*s [in]*	pcs
XYLW806060	WHT340 WHT440 WHT540	23	60	60	6,0	*7/8*	*2 3/8*	*2 3/8*	*1/4*	10
XYLW808080	WHT620	27	80	80	6,0	*1 1/16*	*3 1/8*	*3 1/8*	*1/4*	10
XYLW8080140	WHT740	30	80	140	6,0	*1 3/16*	*3 1/8*	*5 1/2*	*1/4*	1

RELATED PRODUCTS

HBS
COUNTERSUNK SCREW FOR WOOD

ULS 440
WASHER

WHT
ANGLE BRACKET FOR TENSILE LOADS

For more information on the products, go to www.rothoblaas.com.

TESTED

The static performance was tested at the University of Innsbruck for use in safe static calculations.

SAFE

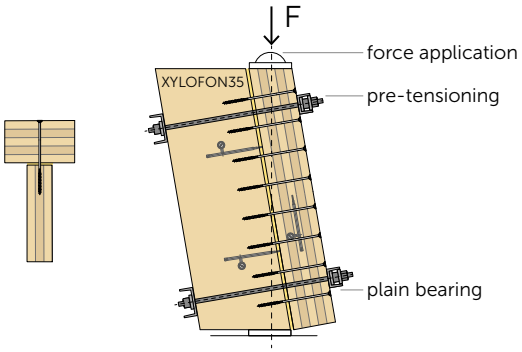
Thanks to its polyurethane blend (80 shore), it is extremely chemically stable and resistant to creep deformation.

XYLOFON WASHER | Tests performed

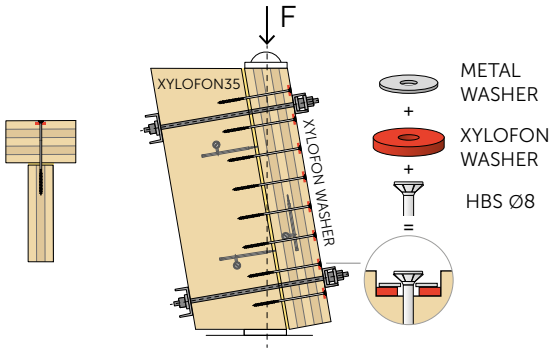
EXPERIMENTAL INVESTIGATION

Through experimental testing and analytical approaches, the mechanical and deformation performance of connections made with HBS 8x280 screws between CLT panels installed with or without XYLOFON WASHER separating washers was analysed.

TEST [T-X]
(CLT - XYLOFON35 - CLT)



TEST [T-X-W]
(CLT - XYLOFON35 + XYLOFON WASHER - CLT)



SERIES	F_{mean} (1) [kN]	$F_{R,k}$ [kN]	pre-tens. (2) [kN]	K_{ser} [N/mm]	K_u [N/mm]
T-X	54,4	40,1	0	7114	3629
	70,9	60,5	30	9540	4726

SERIES	F_{mean} (1) [kN]	$F_{R,k}$ [kN]	pre-tens. (2) [kN]	K_{ser} [N/mm]	K_u [N/mm]
T-X-W	65,0	48,3	0	6286	4330
	76,2	63,4	30	7997	5080

(1) Average value for 3 tests.
(2) Preload forces of 30 kN were applied to simulate the operating load.

By adding XYLOFON WASHER separating washers, there is an increase $F_{R,k}$ related to the increase of the axial resistance of the connection (rope effect).

Use the QR-code to download the complete manual!
www.rothoblaas.com

PERFORMANCE

Acoustic performance

K_{ij} = **18** dB

K_{ij}: vibration reduction index (data estimated from experimental measurements)

See the manual for more information on configuration.