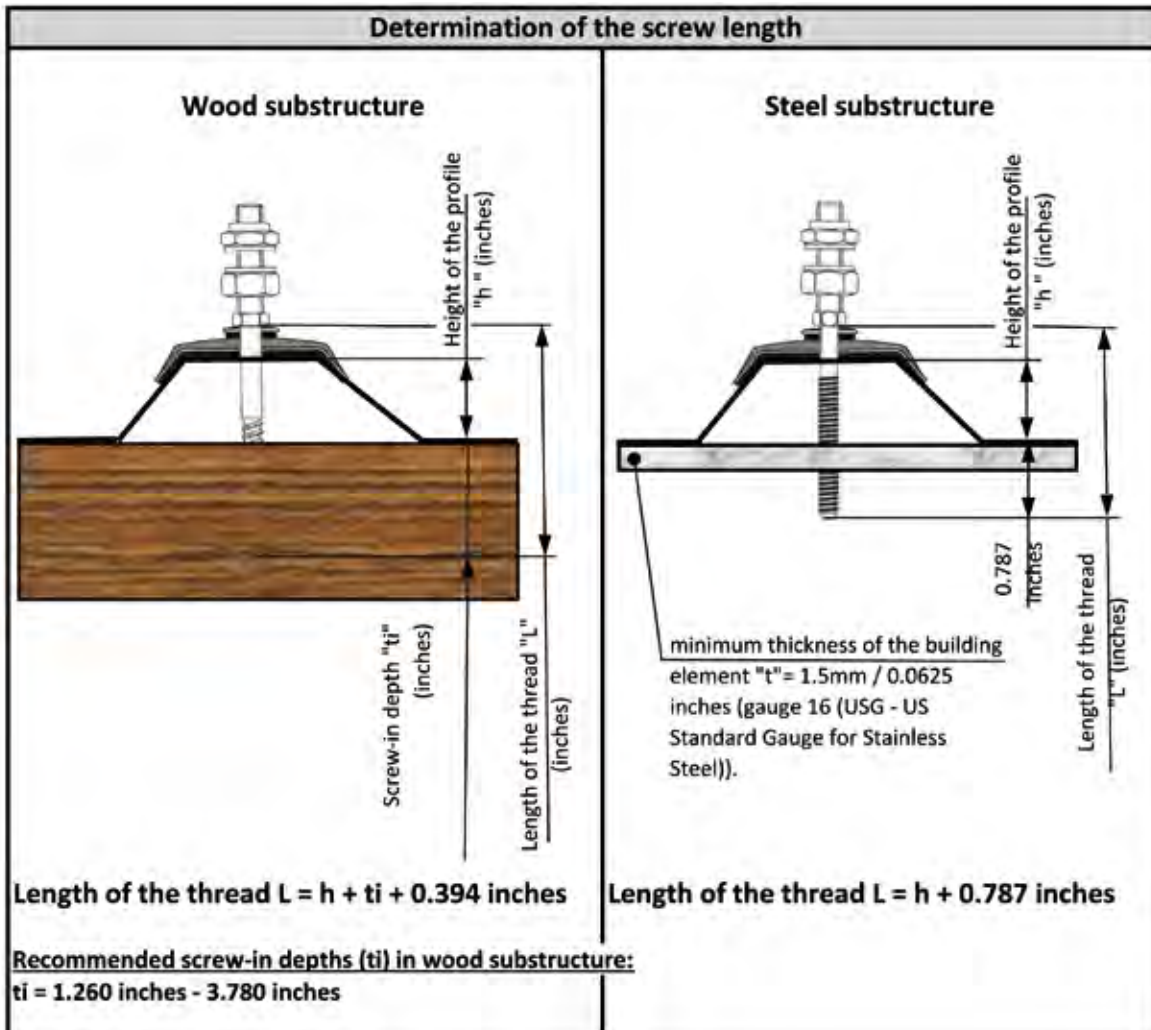


## EJOT Solar Fastenings – Technical Data Sheet

Screw - Options			
Material of the substructure	Wood		Steel
Recommended screw	JA3-SB		JZ3-SB
Diameter (d) of the setscrew (inches)	0.394 (M10)		0.394 (M10)
Length (Lg) of the setscrew (inches)	1.969		1.969
	2.756		2.756
	Special length *		Special length *
Screw diameter (D) (inches)	5/16		5/16
Length (L) of the screw (inches)	3.150		2.520
	3.937		3.150
	5.118		3.937
	5.906		4.921
	7.087		5.906
	7.874		6.299
	Special length *		Special length *

\* Special lengths on request possible



## Sealing - Options

**Sealing system:** EJOT ORKAN Storm Washer + sealing washer E16

Sealing washer E16  
EJOT ORKAN Storm Washer (aluminum storm washer + EPDM sealing stripe)



### Recommended applications



Trapezoidal profiles



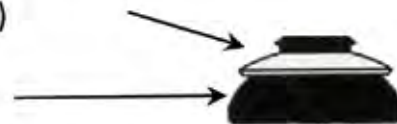
Sandwich elements



Corrugated profiles (steel)

**Sealing system:** Sealing element FZD

Compression washer (A2)  
EPDM sealing element

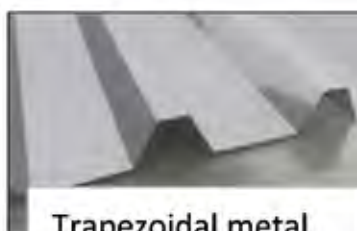


### Recommended applications



Fiber cement profiles

**... also applicable for:**



Trapezoidal metal profiles

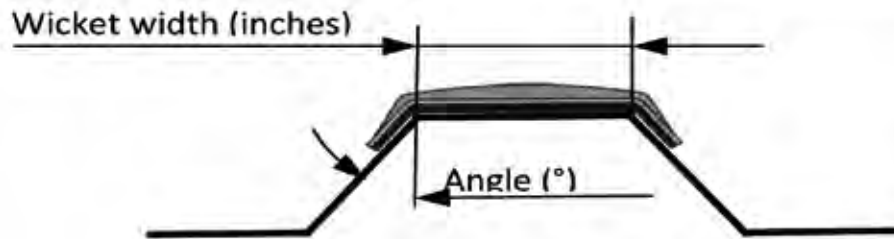


Sandwich elements

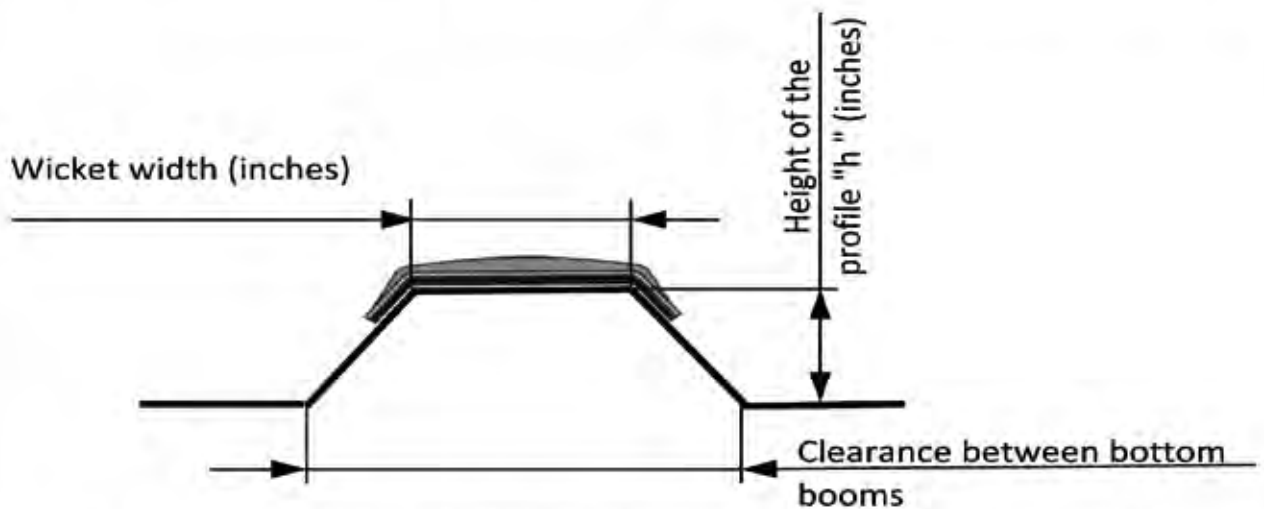


Corrugated profiles (steel)

## Determination of the EJOT ORKAN Storm Washer



The EJOT ORKAN Storm Washer is defined by "wicket width (inches)" and "angle (°)"



Is the angle of the trapezoidal profile unknown, it will be calculated using the following information:

- Wicket width (inches)
- Clearance between bottom booms (inches)
- Height of the profile (inches)

The EJOT ORKAN storm washer is defined as follows (example):



Characteristic load-bearing values $N_{R,k}$ (in Poundal) for the EJOT Solar Fastenings JA3-SB-5/16 x L (d=5/16") in soft wood (strength class C24, usage class 2) Depending on the accumulated load duration and the screw-in depth $l_{ef}$					
Screw-in depth $l_{ef}$ in inches	Standard $k_{mod} = 0,6$ Longer than 10 years (usually intrinsic weight)	Long $k_{mod} = 0,7$ 6 months to 10 years	Medium $k_{mod} = 0,8$ 1 week to 6 months (usually snow)	Short $k_{mod} = 0,9$ Shorter than 1 week (usually wind)	Very Short $k_{mod} = 1,1$ Shorter than 1 minute
	d = 5/16"	d = 5/16"	d = 5/16"	d = 5/16"	d = 5/16"
1.260	9547.575132906 586	11138.83765505 7685	80567.340458 26687	14321.36269935 988	17503.887743 662075
1.575	11934.46891613 3233	13887.38201150 049	15912.625221 510978	17865.53831687 8232	21843.694622 255978
1.772	13381.07120899 7867	15623.3047629 3805	17865.538316 878232	20107.7718708 1842	24592.238978 698784
1.890	14321.3626993 5988	16708.25648258 6526	19022.820151 16994	21409.7139343 96586	26183.501500 84988
1.969	14900.0036165 05733	17359.2275143 75612	19818.451412 24549	22350.0054247 586	27268.453220 498355
2.205	16708.25648258 6526	19456.8008390 29332	22205.345195 472135	25026.2196665 58172	30595.638494 087015
2.362	17865.5383168 78232	20831.0730172 50735	23796.607717 623235	26762.14241799 5735	32765.541933 383967
2.520	19022.8201511 6994	22205.34519547 2135	25387.87023977 4332	28570.3952840 76527	34935.445372 680915
2.756	20831.0730172 50735	24302.91852012 5855	27774.764023 00098	31246.6095258 761	38190.300531 626344
2.835	21409.7139343 96586	25026.2196665 58172	28570.395284 076527	32186.9010162 38112	39275.252251 27482
3.150	23796.6077176 23235	27774.76402300 098	31752.920328 378724	35731.0766337 56464	43687.389244 511956
3.347	25315.5401251 311	29510.6867744 38538	33778.163538 38921	37973.31018769 6654	46363.6034863 1153
3.465	26183.5015008 4988	30595.6384940 87015	34935.445372 680915	39275.25225127 482	48027.196123 10586
3.543	26762.1424179 95735	31246.6095258 761	35731.076633 756464	40215.54374163 684	49112.147842 75433
3.780	28570.3952840 76527	33344.18285052 982	38117.970416 98312	42891.7579834 3641	52367.003001 69976
3.937	29800.0072330 11467	34718.4550287 51225	39709.232939 134214	44627.6807348 7397	54609.236555 639945
4.095	30957.2890673 03172	36092.7272069 72624	41300.4954612 8531	46435.93360095 476	56779.139994 93689
4.331	32765.5419333 83967	38190.30053162 6344	43687.389244 511956	49112.1478427 5433	60033.995153 88232
4.409	33344.18285052 982	38913.6016780 58665	44483.020505 587505	50052.4393331 16345	61118.946873 5308
4.724	35731.0766337 56464	41662.14603450 147	47665.545549 8897	53596.61495063 47	65531.083866 767934

Conversion of dimension units. It has to be noted that no responsibility is taken for any data, despite careful preparation. EJOT disclaims all liability. Converted by  
[http://www.imperialtometric.com/conversion\\_en.htm#force](http://www.imperialtometric.com/conversion_en.htm#force)

Characteristic values of the tensile compressive strength NR,K (poundal) of the EJOT Solar Fastening JZ3-SB-5/16" x L in steel:

	Thickness of the substructure (steel) [inches]			
	0.059	0.079	0.118	≥ 0.158
nr,k [poundal]	15912.625221510978	24592.238978698784	41951.4664930744	49184.47795739757

For intermediate values of the thickness of the substructure, NR,K for the smaller component thickness must be selected.

In the case of thin-walled ( $t_{ll} \leq 0.079"$ , gauge 14 (United States Standard Gauge For Sheet Metal)), un-symmetrical substructures (e.g. C or Z profiles), the characteristic load-bearing values NR,k must be reduced by 30%.

Conversion of dimension units. It has to be noted that no responsibility is taken for any data, despite careful preparation. EJOT disclaims all liability. Converted by [http://www.imperialtometric.com/conversion\\_en.htm#force](http://www.imperialtometric.com/conversion_en.htm#force)

Pre-drilling diameter in mm for profiled metal sheets and substructure

EJOT Solar Fastening	Thickness of the substructure in inches (mm)					
	Steel				Wood	
	0.059" < 0.197" (1,5 ...<5,0mm)	0.197" < 0.295" (5,0...<7,5m m)	0.295" < 0.394" (7,5 ...< 10 mm)	≥ 0.394" (≥ 10 mm)	≥ 1.260" (≥ 32 mm)	≥ 1.575" (≥ 40 mm)
JZS-SB-5/16"(8.0) x L	6.8 mm	7.0 mm	7.2 mm	7.4 mm	-	-
JA3-SB-5/165" (8.0) x L	-	-	-	-	5.5 mm	5.5 mm

Pre-drilling diameter in the profiled metal sheets = Pre-drilling diameter in the substructure

Metric drills have to be used!

## EJOT Baubefestigungen GmbH

In der Stockwiese 35  
D-57334 Bad Laasphe  
Germany  
phone +49 2752 908-0  
fax +49 2752 908-731  
e-mail: bau@ejot.de  
Internet: www.ejot.com

## EJOT Solar Fastening Systems

Represented by  
ATF, Inc.  
3550 West Pratt Avenue  
Lincolnwood, IL 60712 USA  
phone +1 847 933 8588  
fax +1 847 568 3713  
e-mail: solar@atf-inc.com  
Internet: <http://www.ejot.com>