Material

Data sheet Psi values for windows

based on determination of the equivalent thermal conductivity of spacers by measurement



H.B. Fuller

I Product name



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Thickness d in mm

Product name		Spacer height in mm	Material	Thickness d in mm
Ködispace 4SG		5.0	Polyisobutylene	5.0
		D D		
Representative glass constructions	Metal with thermal break	Plastic	Wood	Wood/Metal
				" , <u>"</u>
Double-sheet insulating glass U _g =1.1 W/m²K	0.045	0.037	0.037	0.039
Triple-sheet insulating glass U _g =0.7 W/m²K	0.040	0.035	0.036	0.038
Space between panes	01		$\lambda_{eq,2B}$ in	n W/mK
	Representative glass constructions A	Representative glass constructions Metal with thermal break 0.045 Double-sheet insulating glass U _g =1.1 W/m²K 0.040 Triple-sheet insulating glass U _g =0.7 W/m²K	Representative glass constructions Metal with thermal break Plastic 0.045 0.037 Double-sheet insulating glass U _g =0.7 W/m ² K 0.040 0.035	Representative glass constructions Metal with thermal break Plastic Wood O.045 O.037 O.037 O.037 O.037 Double-sheet insulating glass Ug=0.7 W/m*K O.040 O.035 O.036

Snacer height in mm

Two Box model Characteristic values	Space between panes	Space between panes in mm	$\lambda_{eq,2B}$ in W/mK	
	$ \begin{array}{c c} h_1 & 2 \\ \hline h_1 \downarrow & 1 \end{array} $	Space between pailes in thin	Box 1 · $h_1 = 3 \text{ mm}$	Box 2 · $h_2 = 5 \text{ mm}$
		Can be used for all spacer widths	0.40	0.35

The equivalent thermal conductivity has been determined in accordance with the ift quideline WA-17enql/1 "Thermally improved spacers – Determination of the equivalent thermal conductivity by measurement". The representative linear heat transfer coefficients calculated in this way (representative psi values) apply to typical frame profiles and glazing for the determination of the heat transfer coefficient U_w of windows. They have been determined under the boundary conditions (frame profiles, glazing, glass mounting depth, back covering, primary and secondary sealant) defined in the ift guideline WA-08engl/3 "Thermally improved spacers - Part 1: Determination of the representative Psi value for window frame profiles". This guideline also governs the area of validity and application of the representative psi values. In order to avoid rounding errors, the psi values in the data sheet have been given at 0.001 W/mK. The method for the arithmetical determination of the psi values has an accuracy of ± 0.003 W/mK. Differences of less than 0.005 W/mK are not significant. For further information, refer to the Bulletin 004/2008 "Guide to Warm Edge" of Bundesverband Flachglas.

