

# MadFlex 11 mm SOFT VIBES

While preserving great mechanical features and an amazing flexibility, this MadFlex is also pleasant to the touch, shock absorbent and able to dump vibrations. The perfect choice of materials allows an excellent thermal and acoustic insulation: Thermal transmittance  $U$  lower than  $1.9 \text{ W}/(\text{m}^2 \cdot ^\circ\text{C})$ , according to UNI EN ISO 6946:2008 for horizontal elements, and equal to 2.5 according to DIN52612.



	UNIT	TYPICAL VALUE	TEST
Thickness	mm	11	
Areal weight	$\text{kg}/\text{m}^2$	1.5	
Tensile strength	$\text{kN}/\text{m}$	500	ASTM D3039/D3039M
Failure bending moment	$\text{N}\cdot\text{m}/\text{m}$	170	ASTM D7250/D7250M
Bending stiffness "rigid side"	$\text{N}\cdot\text{m}^2/\text{m}$	30	ASTM D7250/D7250M
Bending stiffness "flexible side"	$\text{N}\cdot\text{m}^2/\text{m}$	0.5	ASTM D7250/D7250M
Flatwise compressive strength	MPa	n/a	ASTM C365/C365M
Heat transfer coefficient	$\text{W}/\text{m}^2\cdot\text{K}$	2.5	DIN52612

Maximum load for a 0,5 m x 0,5 m panel for two different restraint conditions:



Simple supports: 280 kg



Fixed supports: 4,090 kg

## OTHER FEATURES

- Great resistance to atmospheric agents and UV radiations
- Customizable appearance and colour
- Biocompatible
- Minimum internal radius of curvature
- The internal lining is reversibly deformable, allowing to cushion shocks and compressions
- > 100 thousand bending cycles