



Aluminum Honeycomb Panel

Technical Data

| Dimensional Specification | |
|---|--------------------|
| 1.1. Total thickness [mm] | 15 |
| 1.2. Aluminum thickness top cover sheet [mm] | 1 |
| 1.3. Aluminum thickness back cover sheet [mm] | 1 |
| 1.4. Thickness tolerance [mm] | ±0.2 |
| 1.5. Weight [kg/m ²] | 6 |
| 1.6. Standard width [mm] | 1200 |
| 1.7. Width tolerance [mm] | ±2 |
| 1.8. Minimum / maximum length [mm] | 3000 |
| 1.9. Length tolerance [mm] | ±3 |
| 1.10. Core | Aluminum Honeycomb |
| Aluminum sheets | |
| 2.1. Aluminum | A3003 |
| 2.2. Ultimate tensile strength, R _m [N/mm ²] ISO 6892 - 1:2009 | 14900 |
| 2.3. Modulus of elasticity, E [N/mm ²] | 30000 |
| 2.4. Anticorrosive pretreatment | Yes |
| Aluminum core | |
| 3.1. Aluminum alloy | A3003 |
| 3.2. Compressive strength [MPa] | 195 |
| 3.3. Core density [kg/m ³] | 38 |
| 3.4. Cell size [mm] | 9.5 |
| 3.5. Anticorrosive pretreatment | Yes |
| Mechanical properties | |
| 4.1. Moment of inertia, J [cm ⁴ /m] DIN 53293 | 25 |
| 4.2. Rigidity (theoretical value) EJ [KNcm ² /m] DIN 53293 | 91000 |
| 4.3. Section modulus, W [cm ³ /m] DIN 53293 | 24.5 |
| 4.4. Audible reduction, (in house testing) R _w [dB] | 18.5 |
| 4.5. Acoustic insulation, (in house testing) R(A) [dB] | 20 |
| 4.6. Thermal resistance, R [m ² K/W] ASTM E1530 - 11 | 0.013 |
| 4.7. Thermal conductivity, λ [W/mK] ASTM E1530 - 11 | 1250 |
| 4.8. Aluminum thermal expansion [10 - 6 m/(m K)] | 21 |
| 4.9. Temperature stability [°C] | -40 / +80 |
| Fire classification | |
| 5.1. Building market: EN 13501 - 1 | A2 - s1, d0 |