

## Technical Data Sheet DIBOND® inoxal

| Panel thickness :                       |                            | 3 mm                                     | 4 mm   |
|---|----------------------------|--|--------|
| Thickness of Aluminium Layers           | [mm]                       | 0.30                                     |        |
| Standard width                          | [mm]                       | 1250                                     |        |
| Weight                                  | [kg/m <sup>2</sup> ]       | 3.80                                     | 4.75   |
| <b>Technical Properties :</b>           |                            |  |        |
| Section Modulus                         | W [cm <sup>3</sup> /m]     | 0.81                                     | 1.11   |
| Rigidity (Poisson's ratio $\mu = 0.3$ ) | E-I [kNcm <sup>2</sup> /m] | 865                                      | 1620   |
| Alloy of Aluminium Layers               |                            | AlMg1 (EN AW-5005A) H 24                 |        |
| Modulus of Elasticity                   | [N/mm <sup>2</sup> ]       | 70'000                                   |        |
| Tensile Strength of Aluminium           | [N/mm <sup>2</sup> ]       | R <sub>m</sub> 145 – 185                 |        |
| 0.2% Proof Stress                       | [N/mm <sup>2</sup> ]       | R <sub>p0.2</sub> 110 – 175              |        |
| Elongation                              | [%]                        | A <sub>50</sub> ≥ 3                      |        |
| Linear Thermal Expansion                |                            | 2.4 mm/m at 100°C temperature difference |        |
| <b>Core :</b>                           |                            |  |        |
| Polyethylene, Type LD PE                | [g/cm <sup>3</sup> ]       | 0.92                                     |        |
| <b>Surface :</b>                        |                            |  |        |
| Front side                              |                            | Anodised                                 |        |
|   |                            | For interior applications only.          |        |
| Rear side                               |                            | Coated aluminium-metallic                |        |
| <b>Acoustical Properties :</b>          |                            |  |        |
| Sound Absorption Factor                 | $\alpha_s$                 | 0.05                                     |        |
| Sound Transmission Loss                 | R <sub>w</sub> [dB]        | 24                                       | 25     |
| Loss Factor                             | d                          | 0.0057                                   | 0.0072 |
| <b>Thermal Properties :</b>             |                            |  |        |
| Thermal Resistance                      | R [m <sup>2</sup> K/W]     | 0.0080                                   | 0.0113 |
| Heat Transition Coefficient             | U [W/m <sup>2</sup> K]     | 5.61                                     | 5.50   |
| Range of Application                    | [°C]                       | -50...+80                                |        |