



Performance Data Sheet

| Num | Item | Standard | Product Scope | Result | Remarks | Application |
|-----|---|-----------------------------|---------------|---|---|-------------------------|
| 1 | REACH | (EC) NO. 1907/2006 | All WPC | Pass | Test Harmful Contents | Hazardous Substance |
| 2 | Pedestal Vertical Load Test | EN 12825:2001 | Pedestal | | Pedestal Loading Test | Mechanical Test |
| 3 | Fire Performance | EN 13501 | All WPC | Bf1-S1 | For Fire-proof products | Fire-Proofing Test |
| 4 | Fire Performance | ASTM E84 | All WPC | Class A - Top Level | For Fire-proof products | Fire-Proofing Test |
| 5 | Pendulum Test | EN15534-1:2014 and CEN/TS | Suprotect | Pass | Slip Resistance Test | Safety Performance |
| 6 | Moisture Resistance-Boiling Test | EN15534-1:2014 | Suprotect | Pass | | Durability |
| 7 | Abrasion Resistance | ASTM D4060-14 | Suprotect | 37.9mg/1000r | | Durability |
| 8 | Resistance to Artificial Weathering | EN15534-1:2014 | Suprotect | 4.5 Grade of colorfastness | 2000h | Durability |
| 9 | Wind Resistance Test | / | Fence | Pass-No failiure or disengagement | 9-Scale Wind Load | Safety Performance |
| 10 | Moisture Content | EN322.1993 | All WPC | 0.89% | | Durability - Waterproof |
| 11 | Falling Mass Impact Resistance | EN15534-1:2014 | Normal WPC | 9mm | Residual Indentation | Mechanical Test |
| 12 | Bending Strength | EN15534-1:2014 | All WPC | 26.8MPa | | Mechanical Test |
| 13 | Modulus of Elasticity | EN15534-1:2014 | All WPC | 3758MPa | | Mechanical Test |
| 14 | Withdrwal Capacity of Fastners | EN13446:2002 | All WPC | 4139N | Screw Surface Withdrawal Test | Mechanical Test |
| 15 | Withdrwal Capacity of Fastners | EN13446:2002 | All WPC | 3370N | Screw Edge Withdrawal Test | Mechanical Test |
| 16 | Coefficient of Linear Thermal Expansion | ISO 11359-2:1999 | All WPC | 66.75µm/m·°C | | Material Performance |
| 17 | Deflection Temperature under Load | ISO 75:2013 & ISO 75-2:2013 | All WPC | 80°C | | Durability |
| 18 | Oxygen Index | ASTM D2863-13 | Normal WPC | 21.80% | Fire-Resistance | Fire-Proofing Test |
| 19 | Anti-Slip Property | DIN 51130-2014 | Suprotect | R10 | | Safety Performance |
| 20 | Falling Mass Impact Resistance | EN15534-1:2014 | Suprotect | 0.16mm | Testing the Depth of Residual Indentation | Mechanical Test |
| 21 | Resistance to Indentation | EN15534-1:2014 | Suprotect | Brinell Hardness: 65N/mm2 Rate of Elastic Recovery:77.7% | | Durability |
| 22 | Rockwell Hardness | ASTM D785-08 | Suprotect | 83.3R | Surface Hardness | Durability |
| 23 | Coefficient of Linear Thermal Expansion | EN15534-1:2014 | Hyper Wood | 38.6 | | Material Performance |
| 24 | Bending Strength | EN15534-1:2014 | Hyper Wood | 46MPa | | Mechanical Test |
| 25 | Modulus of Elasticity | EN15534-1:2014 | Hyper Wood | 4300MPa | | Mechanical Test |
| 26 | Flexural Breaking Load | GB/T 24508-2009 | All WPC | 4091N | Pass | Mechanical Test |
| 27 | Falling Mass Impact Resistance | GB/T 24508-2009 | All WPC | 6-7mm | Pass | Mechanical Test |
| 28 | Density | GB/T 24508-2009 | All WPC | 1.22 | Pass | Material Performance |
| 29 | Water Absorption Rate | GB/T 24508-2009 | All WPC | 0.90% | Pass | Material Performance |
| 30 | Falling Ball Impact Test at Low | GB/T 24508-2009 | All WPC | -10°C No Crack | Pass | Mechanical Test |
| 31 | Dimension Changing Ratio of Swelling after Immersion in Water | GB/T 24508-2009 | All WPC | <0.1 | Pass | Material Performance |
| 32 | Dimension Changing Ratio after Heated | GB/T 24508-2009 | All WPC | 0.20% | Pass | Material Performance |
| 33 | Thermal-Cold Cycliing Resistance | GB/T 24508-2009 | All WPC | No Cracking, No Bubble, 0.2 | Pass | Durability |
| 34 | Stain Resistance of Surface | GB/T 24508-2009 | All WPC | No Significant Change | Pass | Durability |
| 35 | Free-Thaw Resistance | GB/T 24508-2009 | All WPC | 94% | Pass | Durability |
| 36 | Creep Recovery Ratio | GB/T 24508-2009 | All WPC | 83% | Pass | Mechanical Test |
| 37 | Slip Resistance | GB/T 24508-2009 | All WPC | 45 | Pass | Safety Performance |
| 38 | Formaldehyde Emission | GB/T 24508-2009 | All WPC | E0-lowest level | Pass | Safety Performance |
| 39 | Dissoluble Lead | GB/T 24508-2009 | All WPC | <0.5 | Pass | Safety Performance |
| 40 | Dissoluble Cadmium | GB/T 24508-2009 | All WPC | <0.5 | Pass | Safety Performance |