



## Solid Core - Performance Specification

Physical and mechanical properties	Test Method	Results
Modulus of rupture	ASTM D7031-04 Section 5.5 & ASTM D6109-05 Method A	26.1MPa
Flexural modulus	ASTM D7031-04 Section 5.5 & ASTM D6109-05 Method A	5387MPa
Modulus of rupture after freeze-thaw resistance	ASTM D7031-04 Section 5.20 & ASTM D6109-05 Method A	26.0Mpa
Flexural modulus after freeze-thaw resistance	ASTM D7031-04 Section 5.20 & ASTM D6109-05 Method A	5137Mpa
Impact resistance	ASTM D7031-04 Section 5.12 & ASTM D4495-00(2005)	>123.5J
Specific gravity	ASTM D7031-04 Section 5.14 & ASTM D792-08 Method B	1.318
Water absorption	ASTM D7031-04 Section 5.19 & ASTM D1037-06a Section 23 Method B	0.79%
Moisture content	ASTM D7031-04 Section 5.15 & ASTM D4442-07 Method B	0.47%
Abrasion test	ASTM D7031-04 Section 5.17 & ASTM D4060-10	Wear index : 95.6mg
Static coefficients of friction (Dry condition)	ASTM D2394-05 (2011) Section 33~37	0.48
Static coefficients of friction (Wet condition)	ASTM D2394-05 (2011) Section 33~37	0.55
Sliding coefficients of friction (Dry condition)	ASTM D2394-05 (2011) Section 33~37	0.23
Sliding coefficients of friction (Wet condition)	ASTM D2394-05 (2011) Section 33~37	0.48





## Hollow Core - Performance Specification

Physical and mechanical properties	Test Method	Results
Flexural Strength	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	24.8MPa
Flexural Modulus	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	4470MPa
Flexural Strength (after freeze-thaw)	ASTM D7031-11 Section 5.20 & ASTM D6109-13 Method A	25.1Mpa
Flexural Modulus (after freeze-thaw)	ASTM D7031-11 Section 5.20 & ASTM D6109-13 Method A	4347Mpa
Impact resistance	ASTM D7031-11 Section 5.12 & ASTM D4495-16	21.6J
Specific gravity	ASTM D7031-11 Section 5.14 & ASTM D792-13 Method B	1.357
Water absorption	ASTM D7031-11 Section 5.19 & ASTM D1037-12 Section 23	0.48%
Moisture content	ASTM D7031-11 Section 5.15 & ASTM D4442-15 Method A	0.28%
Abrasion resistance	ASTM D7031-11 Section 5.17 & ASTM D4060-14	Wear index : 121.4mg
Static coefficients of friction	ASTM D7031-11 Section 5.16 & ASTM D2394-05 (2011) Section 33~37	0.45
Sliding coefficients of friction	ASTM D7031-11 Section 5.16 & ASTM D2394-05 (2011) Section 33~37	0.31

