

Morflo[™] 165AL

Product Data Sheet

Product Description

A 1650°C (3000°F) grade, low cement castable exhibiting ultra high strengths, good abrasion resistance and excellent resistance to thermal shock. Contains a non-wetting additive for enhanced resistance to aluminium penetration and corundum growth.

Properties	Morflo 165AL
Region of Manufacture	Europe
Bond Type	Hydraulic
Method of application	Cast
Maximum Service Temperature, °C (°F)	1650 (3000)
Estimated weight of dry material/ m³ of construction, kg (lb)	2597 (162)
Water addition, % by weight	5.0-6.4
Maximum grain size, mm	6
Packaging in bags, kg (lb)	25 (55)

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Density, kg/m³ (pcf), ASTM C134		
oven dried, 110°C (230°F)	2585 (161.3)	
Cold crushing strength, MPa (psi), ASTM C133		
oven dried, 110°C (230°F)	45-105 (6525-15225)	
after 5 hours firing, 1000°C (1832°F)	45-95 (6525-13775)	
Permanent linear change, %, ASTM C113		
after 5 hours firing, 1000°C (1832°F)	+/-0.1	
after 5 hours firing, 1600°C (2912°F)	+/-0.5	
Thermal conductivity, W/m•K (BTU•in./hr•ft²•°F), ASTM C201/417		
600°C (1112°F)	1.85 (12.84)	
Chemical composition, %		
Alumina, Al ₂ O ₃	61	
Silica, SiO ₂	35	
Calcium Oxide, CaO	0.8	
Ferric Oxide, Fe ₂ O ₃	1.9	

Instruction for Use

Highest strength is obtained with monolithic refractory by using the least amount of clean mixing water that will allow thorough working of material into place by vibrating. A mechanical mixer is required for proper placement (paddle type mortar mixers are best suited). After adding the recommended amount of water, mix for 4-6 minutes. Place material within 20 minutes after mixing.

This must be installed under closely controlled conditions using mechanical mixers and vibration. The resultant concrete has a dense, low permeability structure and care must be exercised during initial heating. At top water material can be placed at minimum or no vibration.

Storage and Shelf Life

- Should be stored in dry conditions, unopened packaging on pallets. Do not store on ground. Keep out of rain and damp conditions.
- Shelf life is of six months with original packaging, double shrink film and dehydrating agent provided if the monolithic is stored under these recommended conditions.

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