

Product Description

An insulating concrete based on insulating aggregate and lightweight chamotte, for service up to 1320°C (2400°F), to be installed by casting. It is recommended for applications requiring relatively high mechanical strength and low lime content such as working lining in radiant and convection zones in petrochemical heaters, kiln car tops, and in general high temperature applications where Sulphur is present in the fuel. Firelite LW conforms to ASTM C401-91 class Q.

A separate gunning version is available.

Properties	Firelite LW
Region of Manufacture	EMEA
Bond type	Hydraulic
Method of installation	Cast
Maximum grain size, mm	6
ASTM C401-91 Classification	Q
Maximum service temperature, °C (°F)	1320 (2408)
Net material requirement, kg/m ³ (lbs/ft ³)	1260 (78.6)
Water addition, % by weight	50
Packaging in bags, kg (lbs)	25 (55)

Whilst the values and application information in this datasheet are typical, they are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials - Thermal Ceramics.

Firelite[®] LW

Product Data Sheet



Properties	Firelite LW
Bulk Density, kg/m³ (pcf), ASTM C134	
dried 24 hours @ 110°C (230°F)	1200 (74.9)
fired 5 hours @ 816°C (1500°F)	1150 (71.8)
Cold crushing strength, MPa (psi), ASTM C133	
dried 24 hours @ 110°C (230°F)	4.3 (623.5)
fired 5 hours @ 816°C (1500°F)	3.2 (464)
Permanent linear change, %, ASTM C113	
after 5 hours firing @ 815°C (1500°F)	-0.2
Chemical composition, %	
Alumina, Al ₂ O ₃	37.8
Silica, SiO ₂	46.5
Ferric Oxide, Fe ₂ O ₃	4.8
Titanium Oxide, TiO ₂	1.2
Calcium Oxide, CaO	8.3
Thermal conductivity, W/m·K, ASTM C417	
200°C	0.33
400°C	0.34
600°C	0.36
800°C	0.38
1000°C	0.40

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 12 months with original packaging, double shrink film and dehydrating agent provided if the monolithic is stored under these recommended conditions.

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