MASTERING TECHNOLOGY AND PRACTICALITY

an ARDEXGROUP Brand

ST-LWC

Pre-batched Lightweight Concrete

Variety of density & strength options

Single-component, simply mix with water for application

Different performances in thermal and acoustic insulation for different density of lightweight concrete

Low hydration heat prevents damage to pre-embedded PVC pipes or fixtures

Non-toxic formulation, non-hazardous to human beings

Other desired density and strength properties of lightweight concrete not stated in the technical data sheet can be tailor-made subject to request

ARDEX SCORETECH LIMITED
Unit 01, 18-20, 11/F, Tower B,
New Mandarin Plaza,
No 14 Science Museum Road,
Tsim Sha Tsui, Kowloon, HK
Tel : 852-2165 0900
Fax : 852-2590 0511
Email : enquiry@ardexscoretech.com

ST-LWC

Pre-batched Lightweight Concrete

PRODUCT DESCRIPTION

ST-LWC is a proprietary pre-batched lightweight concrete, which is specifically designed for application of screeding, filling up sunken, void/trench/gap, etc. ST-LWC is supplied in various hardened dry density typically ranging from ~700 kg/m^3 to 2000 kg/m^3 with corresponding compressive strength ranging from ~1 MPa to 45 MPa, with or without early strength requirement. Other dry density and compressive strength combination of lightweight concrete can also be tailor-designed subject to project requirement. ST-LWC is not affected by bubble burst or other factors that could compromise its volume stability. Moreover, it will not induce high hydration heat, which could affect the pre-embedded PVC pipes or other utilities. ST-LWC not only has good thermal and acoustic insulating properties but also a good solution to situations with limitation on deadload to structures or lifting weight.

AREAS OF APPLICATION

- Lightweight screeds for interior and exterior areas
- Insulation and levelling layer on roofs, balconies, etc.
- As a flat substrate for receiving liquid-apply waterproofing membrane or waterproofing sheet
- Filling up sucken areas, toilet floors, pipe trenches and cavity walls, etc.
- Walls and slabs for MiC units
- Infill for abandoned pipelines, ducts and conduits
- Thermal and acoustic insulation layer
- Structural and non-structural applications with different density and strength requirements
- Consult Ardex Scoretech staff for other suitable applications

SUBSTRATE PREPARATION

The substrate must be sound, even, well-aligned, clean, and free of loose particles, grease, and any other unwanted contaminants.

INSTALLATION

1. Mix ST-LWC with the recommended amount of water using an electric mixer until a uniform and lump-free consistency is achieved.
2. The mixing tools and duration required for ST-LWC may vary depending on the density and strength specifications. Always follow the construction guidelines provided by Ardex Scoretech for proper mixing and application.
3. For application tips on other ST-LWC variants, consult Ardex Scoretech staff.

CURING

Natural air curing is normally adequate for ST-LWC. Under exterior environment or unfavourable conditions, water curing is recommended to ensure ST-LWC achieves the best performance.

PACKAGE

Packaging of ST-LWC depends on different lightweight concrete models. Consult Ardex Scoretech staff for details.

SHELF LIFE

ST-LWC has a shelf life of 12 months if well-kept in dry condition on lifted floor.

HEALTH & SAFETY

A qualified mask or equivalent personal protective equipment must be worn when handling this product. This product is non-toxic and does not contain harmful substances but may cause allergies or irritation to eyes and skin. If it accidentally comes into contact with eyes, rinse immediately with plenty of water.

REFERENCE STANDARDS

Hong Kong Standard: CS1 : 2010

ST-LWC
Pre-batched Lightweight Concrete

PRODUCT INFORMATION

Maximum Grain Size	Subject to requirement	
Hardened Dry Density	~700 kg/m^3 to 2000 kg/m^3 (subjected to customer' s requirement)	
Compressive Strength at 28 days (CS1 : 2010)	~1 MPa up to 45 MPa with corresponding density	
Typical Light-weight concrete design	Hardened Dry Density (kg/m^3)	Compressive Strength (MPa)
	~700 ± 8%	≥ 1
	~1000 ± 5%	≥ 5
	~1200 ± 5%	≥ 10
	~1350 ± 5%	≥ 10
	~1850 ± 5%	≥ 20

* Note: The test standards for the product performance stated above refer to laboratory test only.