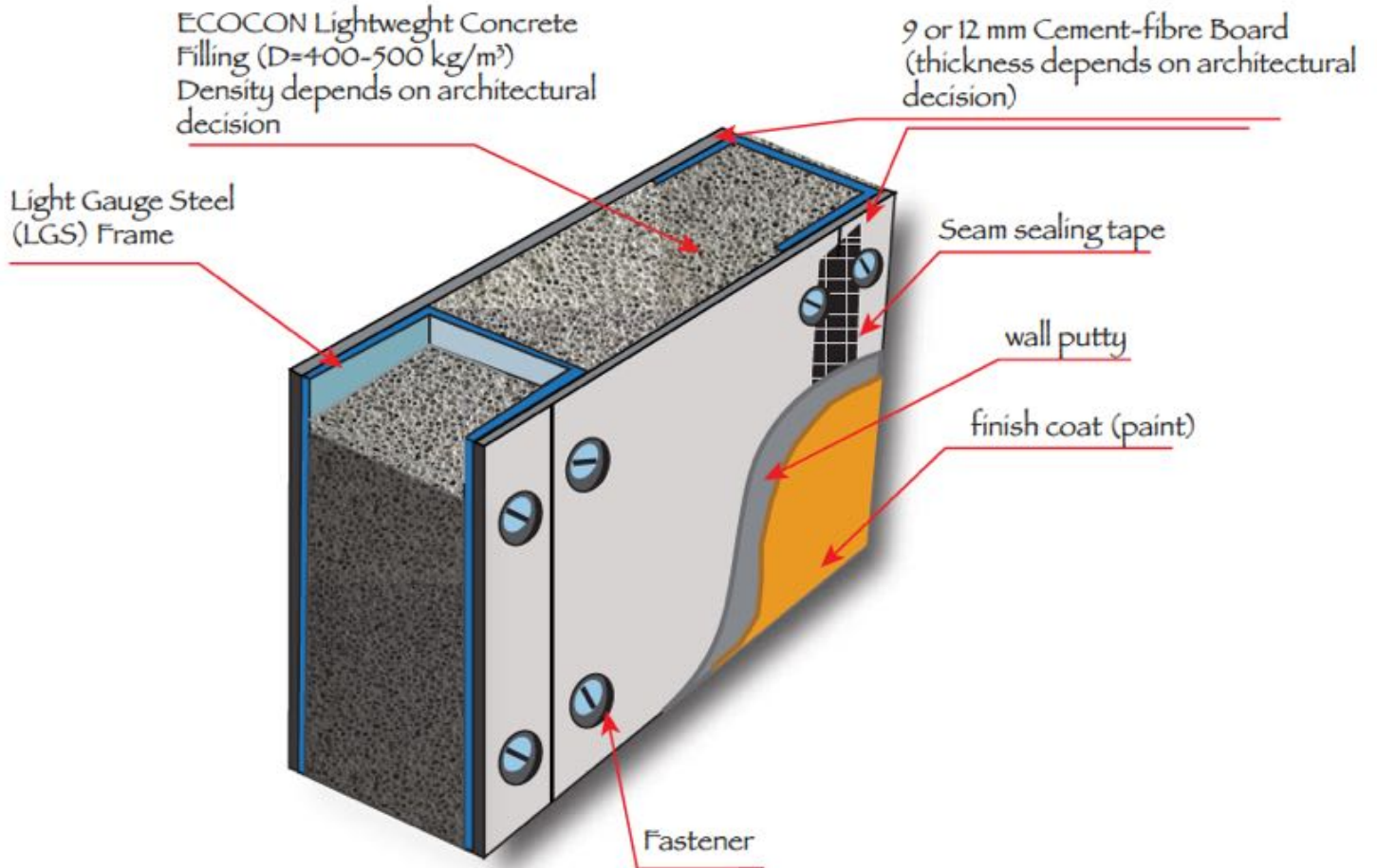


ECOCON SOLID WALL SYSTEM (ESWS)



It is recommended to use the following thicknesses for ECOCON Solid Wall System:

Wall specification	Thickness, mm	Notes
Partitions separating: Apartments Residential units Hotel rooms School and institutional classes	200	
Rooms partitions Inside office partitions Partitions in industrial and storage warehouses	100, 150, 200	Depending on architectural decision

ECOCON Solid Wall System (ESWS) Technical Description
ECOCON Solid Wall Technical Specifications

Specifications:	Data	Notes
Fire rating for 100 mm wall, hours	Not less than 3 hours	Fire rating test in Dubai Material Lab
Sound resistance for 200 mm wall, dB	Not less than 50	Sound test in Dubai Material Lab
Weight per square meter, kg:		
100 mm wall	50 kg	
150 mm wall	70 kg	
200 mm wall	90 kg	

U-value definition for different thickness of ECOCON Solid Wall

Wall thickness, mm	R-value	U-value	Notes
100 mm	1.01	0.99	
150 mm	1.43	0.7	
200 mm	1.85	0.54	Corresponds to Dubai Municipality requirement for outside walls

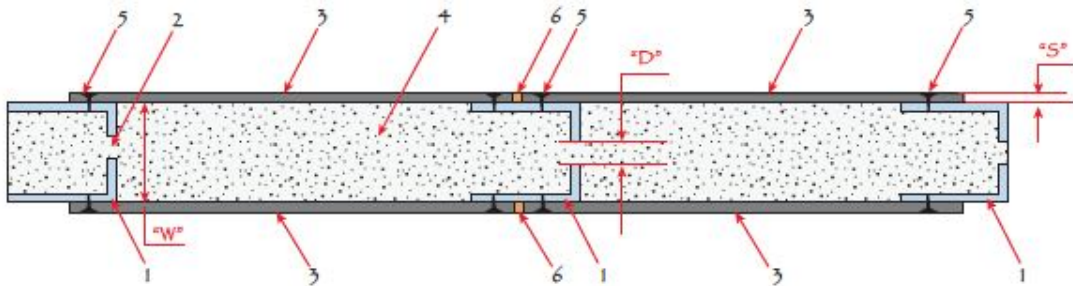
ESWS consists of (Drawings 1): a) steel frame (metal studs and tracks) –(1); b) cement-fiber boards fixed to steel – (3); c) ECOCON lightweight concrete in-filling – (4); d) fixing elements (self-tapping screws, nails, rivets, etc.) – (5); e) finishing materials (tapes, sealants, etc.) – (6).

Steel studs should have 20 – 30 mm holes (2) located at distance 250 – 300 mm at the whole length of stud. These holes provide distribution of ECOCON lightweight concrete throughout the wall volume and prevent overfilling and voids.

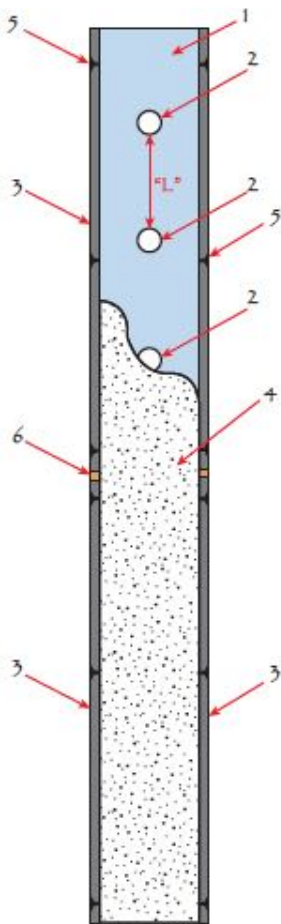
Fixing screws (5) have length providing reliable fixing of board to LGS stud.

Drawing 1: ECOCON Solid Wall System

ECOCON SOLID WALL DETAIL



- 1 - Steel studs (W = 60, 89, 100, or 150 mm)
- 2 - Holes in studs (D = 20 ... 30 mm; L = 250...300 mm)
- 3 - Cement fiber board, calcium-silicate board (S = 9 ... 12 mm)
- 4 - ECOCON lightweight cellular concrete (Density = 350 ... 450 kg/m³)
- 5 - Fixing screws
- 6 - Joint sealing compound



- 7 - Steel tracks
- 8 - MEP piping

