

# MgO green C25 M-M and C25 M-O composite building panel

## 1. Product identification/Trade name

MgO green C25 M-M and C25 M-O composite building panel Producer: LS Tech-Homes SA, ul. Karola Korna 7/4, 43-300 Bielsko-Biała, PL Customer Service Centre: ul. Junacka 31, 43-502 Czechowice-Dziedzice Tel./fax: +48 32 210 18 26, www.lstechhomes.com, sekretariat@lstechhomes.com

## 2. Product description

MgO green C25 M-M and C25 M-O composite building panel is composed of three layers:

- 1. Cladding made of 11 mm thick MgO green board.
- 2. Polyurethane adhesive vapor barrier film.
- 3. Core Styrofoam EPS 100, 230 mm thick.
- 4. Polyurethane adhesive vapor barrier film.
- 5. Cladding made of 11 mm thick MgO green board or 12 mm thick OSB-3 board.

#### 3. Application

MgO green C25 M-M and C25 M-O composite building panel is dedicated for use inside and outside buildings if the panel is appropriately protected against weather. Inside buildings it can be used to finish walls, ceilings and floors and outside buildings as an element of roof covering and under elevation siding. Ceiling building panels are used to prepare ceilings filling – in building society inside in production plants if appropriately protected against weather.

#### Possible application:

- Single family houses and multi-family houses,
- Multi apartment residential buildings,
- Public utility buildings,
- Leisure facilities,
- Utility buildings,
- Temporary buildings.

## 4. Technical Parameters

- Panel with maximal 290 cm span between supports, should bear load not lower than 2,5kN/m<sup>2</sup>.
- Compression strength or compression stress: 0,119 MPa.
- Flexural modulus (compression): 5,12 MPa.
- Carrying capacity of free panel when loads act towards support, maximal spa between support 290 cm, bear loads not lower than 2,5kN/m<sup>2</sup>.
- Thermal resistance m<sup>2</sup>·K/W: 6,50.
- Fire resistance: EI30.





- Very high resistance to hit. Standard test of soft object impact did not caused any visible damages and small dents which occured during the test did not have any influence on further usage of the panels.
- Bending caused by the temperature difference is 0,08% of span length between assembling points and is invisible.
- Stretching strength: 0,22 MPa.
- Flexural strength (stretching): 9,77 Etc.
- Carrying capacity in 3 panels arrangement is 46kN.
- Used expanded polystyrene has declared value of diffusion resistance ratio 1,47 [-], which is typical for majority
  of products available in the market. Magnesium oxide board obtained diffusion resistance ratio 579,56 [-] this value
  is really good and it ensures fast and effective drainage of vapour condensate from the inside of the thermal barrier,
  lowering the risk of barrier materials degradation.
- U value = 0,15 (W/m<sup>2</sup>K)
- Acoustic insulation up to 30dB

#### 5. Packaging, storage and transport

MgO green C25 M-M and C25 M-O composite building panel should be packed, stored and transported in the way which provides that the technical parameters wouldn't be changed. The product should be stored in dry place. Product is not dangerous as far as internal or international transport law is concerned. Maximal panel dimensions: 1220 x 3000 mm.

MgO green C25 M-M and C25 M-O composite building panel should be used according to the technical project prepared for specified building object including:

- Norms, technical and building especially, Minister of Infrastructure Regulation of 12th April 2002 on technical conditions of buildings and their location (Dz.U.No75 of 2002 item 690 with changes).
- Technical Approval ITB AT-15-8776/2011.
- Mounting instructions prepared by the producer.

LS Tech-Homes S.A. Siedziba spółki: ul. Karola Korna 7/4 43-300 Bielsko-Biała NIP: 547-21-05-335



Biuro Obsługi Klienta: ul. Junacka 31, 43-502 Czechowice-Dziedzice tel./fax: +48 32 210 18 26 e-mail: sekretariat@Istechhomes.com www.lstechhomes.com



Bank Millenium S.A. Nr konta: 021160220000000185135453 Kapitat 2akładowy: 8 350 000 zł w całości opłacony Sąd Rejonowy w Bielsku-Białej VIII Gospodarczy Krajowego Rejestru Sądowego KRS: 0000378509, REGON: 241140645

Projekt współfinansowany ze środków Europejskiego Funduszu Rozwoju Regionalnego w ramach Programu Operacyjnego Innowacyjna Gospodarka 2007-2013

