AODISI

FIRE TECHNOLOGY

产品资料与销售咨询

PRODUCT DOCUMENTATION & SALES CONTACT

ODITEC - Technical Data Sheet-en

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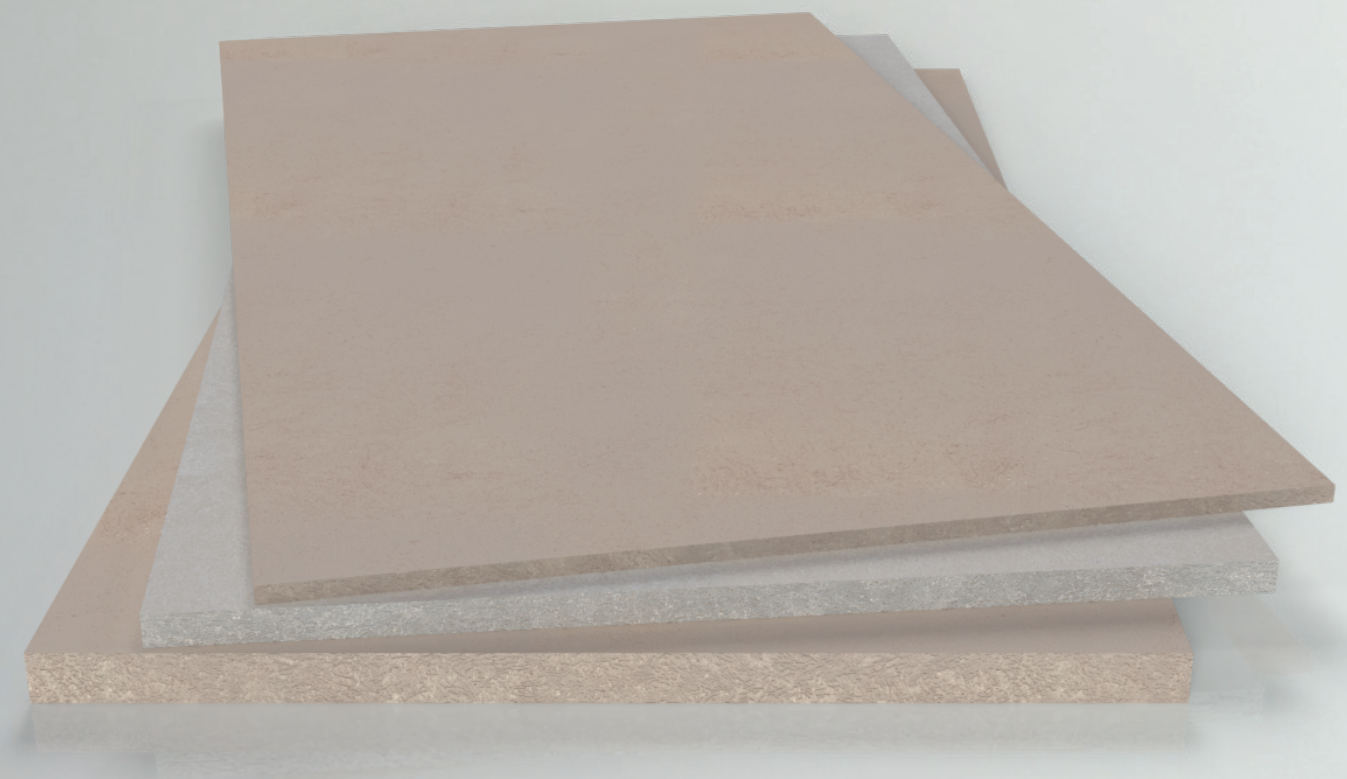
www.gmfireproof.com

以上为销售联系信息，不替代安全数据表中的应急联系电话。
原始技术内容及制造商、检测机构和证书签发信息见后续资料页。

Sales contact only; emergency contacts in safety data sheets remain applicable.
Original technical, manufacturer and certification details follow.

Technical Product Data Sheet

ODITEC



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Tech. Rev.: 1.0
Ling. Rev.: 1.0

Product description

ODITEC is a high-performance insulation board made from calcium silicate that is both non-combustible and low-weight. ODITEC offers outstanding mechanical strength and a high degree of resistance to frost, moisture and thermal loads. Its resistance to decay makes it ideal for use in challenging applications. ODITEC is easy to process and can be combined with a variety of surface materials including steel, MDF, aluminium, chip boards, and more.

Reaction to fire

- Class A1 (DIN EN 13501-1)

Properties

- Non-combustible and extremely lightweight
- Good mechanical strength and frost resistance
- Low thermal longitudinal expansion and contraction
- Resistant to high temperatures and rot
- Environmentally friendly and easy to work
- Can be combined with steel, MDF, aluminium, chip boards, three-layer plywood boards

Fields of application

- Core material for fire-resistant doors and windows
- Used in fireproof walls and floors
- Can be combined with many other materials for decorative and functional applications
- Protection and insulation in industrial and commercial buildings

Technical data

Property		ODITEC 2.25	ODITEC 2.5	ODITEC 3.0
Composition		Calcium silicate, does not contain quartz or asbestos		
Material structure		Lightweight, non-combustible material		
Bulk density [kg/m³]		225	250	300
Temperature stability [°C]		1000		
Thermal conductivity [W/(m·K)]	at 200 °C	0.07	0.08	0.09
	at 400 °C	0.09	0.1	0.11
	at 600 °C	0.12	0.12	0.14
	at 800 °C	-	0.14	0.15
Gas permeability [nPm]		0.7	0.5	1
Pressure resistance [N/mm²]		2.8		
Bending resistance [N/mm²]		1.4	1.3	1.7
Linear shrinkage at 950 °C (12 h)		1%	1%	1.5%
Dimensional stability at 23 °C, 90% relative humidity		No loss of length or width		
Thermal coefficient of linear expansion		5.5×10^{-6}/K (measured between 20 °C and 750 °C)		
Total porosity		91%	90%	89%
Creep behaviour (800 °C, 0.1 MPa)		3.3%	0.4%	0.4%
Moisture content (mass percentage)		–	2.5%	2.5%

Chemical analysis	ODITEC 2.25	ODITEC 2.5	ODITEC 3.0
Silicon dioxide	47%	47%	46%
Calcium oxide	42%	43%	45%
Loss on ignition (1025 °C)	9%	8%	6%

Fields of application and possible linings for ODITEC boards

ODITEC can be combined with a variety of materials to meet specific functional and aesthetic requirements. These materials include steel, MDF, aluminium, chip boards and three-ply plywood boards. These combination options provide flexibility in design and allow the boards to be used in different construction projects where fire protection and mechanical stability are of fundamental importance.

Colour

Grey

Processing information

1. Surface preparation:
   - Before using ODITEC, ensure the surfaces are free from dust, grease and other dirt to ensure optimal adhesion and stability. This is particularly important for applications where surface materials such as steel, MDF or aluminium are applied to the calcium silicate substrate.
2. Installation and fixing:
   - ODITEC boards are easy to work and can be cut and drilled, making them easy to adapt to special construction requirements. The boards are available in dimensions of 2040 × 1220 mm or 2440 × 1220 mm and thicknesses from 22 to 60 mm as standard. Upon request, the boards can be sanded on both sides for a smooth surface and a precisely fitting installation.
3. Safety notes:
   - Follow the usual safety measures for the workplace, including the wearing of protective gloves and safety glasses. Clean skin thoroughly after working with the product. We recommend using extraction systems to minimise exposure to dust.

Delivery forms

Standard lengths [mm]	2040 / 2440
Standard widths [mm]	1220
Standard thicknesses [mm]:	22 to 60

ODITEC can be cut to the sizes required for a specific construction, assuming a maximum size of 2440 mm x 1220 mm. The boards can be sanded on both sides on request.

Tolerances [mm]

Length/width: ±2.5

Thickness: ±0.3 mm

