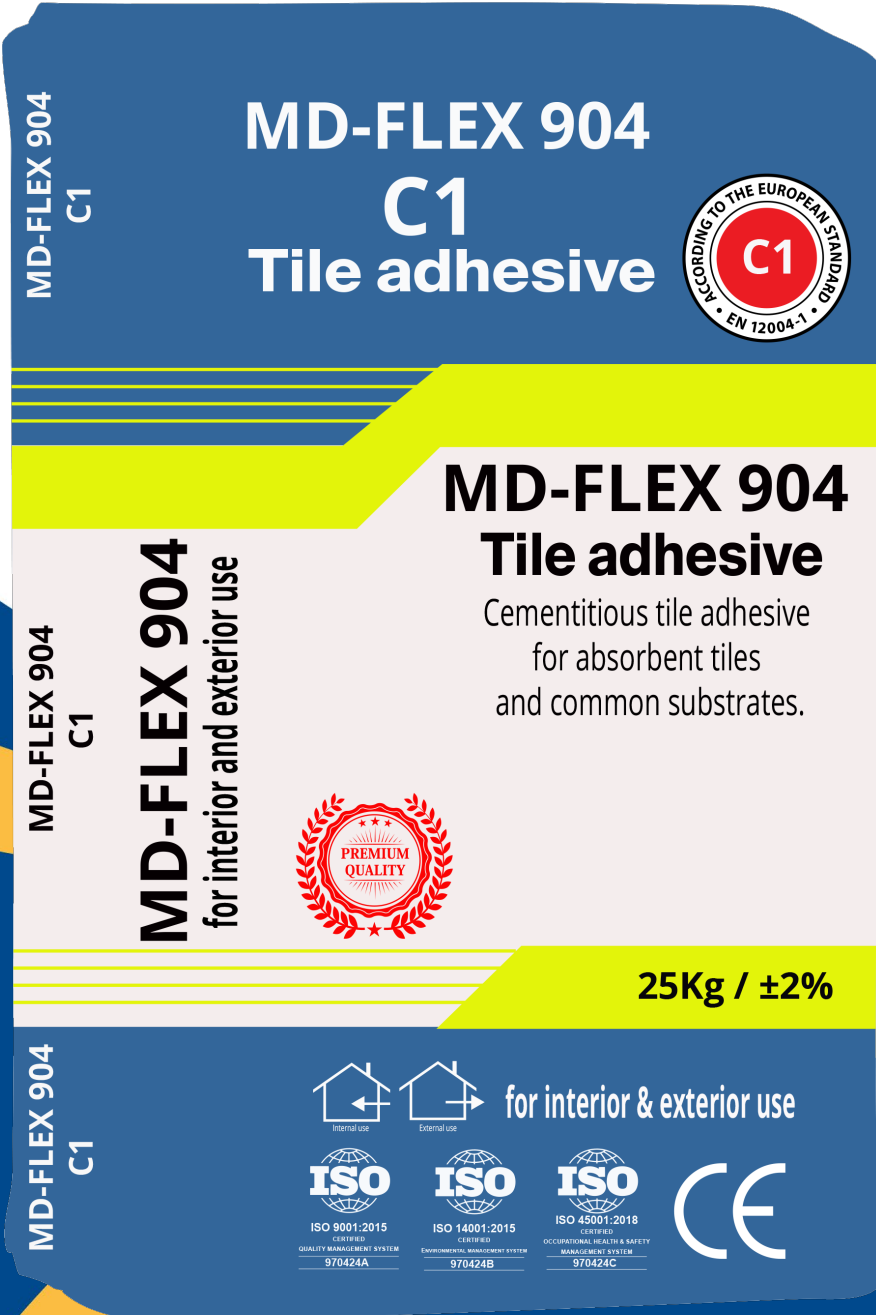




# MD-FLEX 904 (C1)

General purpose, cementitious tile adhesive with high slip resistance use



# MD-FLEX 904 (C1)

C1



**General purpose, cementitious tile adhesive with high slip resistance use**

## Description

MD-FLEX 904 C1 is a polymer modified water resistant, single component, cement based adhesive suitable for interior and exterior domestic and light commercial use. MD-FLEX 904 C1 is designed to bond most ceramic, porcelain, mosaic and stone tiles in a broad range of applications including wet areas such as showers and wet rooms. MD-FLEX 904 C1 is supplied in grey and white colours. MD-FLEX 904 C1 meets the requirement for ANSI 118.1.

## Typical Applications

- ❖ Residential
- ❖ Light commercial
- ❖ Floor and wall tiling

## Features

- ❖ Water resistant
- ❖ High initial grab
- ❖ Non slump
- ❖ Designed for Middle East Climate.
- ❖ Suitable for glazed and unglazed ceramic tiles, natural stone and mosaic
- ❖ Used for semi-vitrified tiles such as ceramic and faience
- ❖ tiles (absorption 3% – 10%), and non-vitreous tiles such
- ❖ as terracotta (absorption 10% - 20%).

## Suitable Substrates

Wall: suitable for use on concrete, cement-based plaster, brickwork and dense concrete blocks.

Floors: cement-based screeds and concrete.

**Technical Data Sheet (TDS)**



ISO 9001:2015  
CERTIFIED  
QUALITY MANAGEMENT SYSTEM  
970424A



ISO 14001:2015  
CERTIFIED  
ENVIRONMENTAL MANAGEMENT SYSTEM  
970424B



ISO 45001:2018  
CERTIFIED  
OCCUPATIONAL HEALTH & SAFETY  
MANAGEMENT SYSTEM  
970424C



# MD-FLEX 904 (C1)

C1



**General purpose, cementitious tile adhesive with high slip resistance use**

## LIMITATIONS

Do not use for:

- ❖ Continuously submerged conditions.
- ❖ Thick bed applications. » Tile over tile applications.
- ❖ Cases that require a rapid utilization for the surfaces.
- ❖ On metal, rubber, PVC or wood substrates. » for vitrified or impervious tiles such as porcelain (absorption < 3%), use C2 grade tile adhesives instead.

## STANDARDS

MD-FLEX 904 C1 complies with EN 12004 as a normal cementitious tile adhesive with slip resistance (C1T).

## METHOD OF USE

### SUBSTRATE PREPARATION

All surfaces must be clean, dry and free from dust, oil, grease, paints or any loose material.

Concrete and cement based substrates must be sufficiently cured and dimensionally stable.

Allow time for shrinkage and structural strain movements. Gypsum boards, plaster boards, anhydrite screeds, or any highly absorbent cement based substrates such as hollow blocks and foam concrete must be sufficiently dry and free from dust.

**Technical Data Sheet (TDS)**



# MD-FLEX 904 (C1)

C1

**General purpose, cementitious tile adhesive with high slip resistance use**



## APPLICATION

- ❖ Apply a thin layer of the adhesive onto the substrate using the flat edge of the trowel.
- ❖ Use a notched trowel to have a uniform thickness according to the size of the tile.
- ❖ Comb the adhesive horizontally with a suitable notched trowel with a tooth size of 8x8 or 10x10 mm to achieve a bed thickness of 2-5 mm.
- ❖ On a very flat base you can also use a 6x6 mm trowel. » For vertical application on walls, the adhesive should be combed with a trowel only in a horizontal (parallel) direction to the floor.
- ❖ Place the tiles with firm pressure and fix it in place with a rubber hammer to ensure proper contact with the adhesive leaving no cavities or air bubbles.
- ❖ When laying larger tiles, apply the adhesive not only on the base but also on the back of the tile (back buttering).
- ❖ Leave a minimum of 2 mm of joint between the tiles, the joint for large tiles must be at least 3 mm.
- ❖ For rooms larger than 36 m<sup>2</sup>, provide an expansion joint.
- ❖ It is always better to work in a manageable area that can be tiled within the open wet time of the adhesive.
- ❖ Use a damp sponge to clean the faces of the tiles from any accidental adhesive. » Leave the tiled surfaces for 24 hours before grouting, brush the joints between the tiles before grouting.

**Technical Data Sheet (TDS)**



ISO 9001:2015  
CERTIFIED  
QUALITY MANAGEMENT SYSTEM  
970424A



ISO 14001:2015  
CERTIFIED  
ENVIRONMENTAL MANAGEMENT SYSTEM  
970424B



ISO 45001:2018  
CERTIFIED  
OCCUPATIONAL HEALTH & SAFETY  
MANAGEMENT SYSTEM  
970424C



# MD-FLEX 904 (C1)

C1

General purpose, cementitious tile adhesive with high slip resistance use



## MIXING

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used.

6.75 – 7.25 liters of clean fresh water for each 25 kg bag (water/powder ratio of 0.27 - 0.29 by weight) should be added to a clean container. The powder is then added slowly to the water while mixing continuously at low speed (400 - 600 rpm).

Mixing time should be continued for 3 minutes until a uniform consistency and free of lumps mixture is obtained. Allow a slake time for 2 - 3 minutes, then remix for additional 1 minute without adding any more water.

## PACKAGING

MD-FLEX 904 C1 is available in 25 kg bags.

## CONSUMPTION

Approximately 6 - 7 m<sup>2</sup>/25 kg bag @ 3 mm thickness.

## STORAGE

MD-FLEX 904 C1 has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 30°C.

Technical Data Sheet (TDS)



ISO 9001:2015  
CERTIFIED  
QUALITY MANAGEMENT SYSTEM  
970424A



ISO 14001:2015  
CERTIFIED  
ENVIRONMENTAL MANAGEMENT SYSTEM  
970424B



ISO 45001:2018  
CERTIFIED  
OCCUPATIONAL HEALTH & SAFETY  
MANAGEMENT SYSTEM  
970424C



# MD-FLEX 904 (C1)



**General purpose, cementitious tile adhesive with high slip resistance use**



## TECHNICAL PROPERTIES @ 25<sub>0</sub> C:

Fresh wet density:	1.65 ± 0.10 kg/m <sup>3</sup>
BDS EN 1015-6	
Slip resistance:	< 0.5 mm
BDS EN 1308	
Open time:	20 min
ISO 13007-2,4.1	

## Tensile adhesion strength in compliance with EN 12004

Initial:	≥ 0.5 N/mm <sup>2</sup>
BDS EN 1348	
After immersion in water:	≥ 0.5 N/mm <sup>2</sup>
BDS EN 1348	
After heat ageing:	≥ 0.5 N/mm <sup>2</sup>
BDS EN 1348	
Tensile adhesion strength after freeze-thaw cycles:	≥ 0.5 N/mm <sup>2</sup>
BDS EN 1348	
Open time - tensile adhesion strength:	≥ 0.5 N/mm <sup>2</sup> (after 20 min)
BDS EN 1346	

**Technical Data Sheet (TDS)**



# MD-FLEX 904 (C1)

C1



EL-THAGR COMPLEX – BUILDING NO. 2, APARTMENT  
105, EL-NOZHA AIRPORT ROAD ,DHL BUILDING -  
5431001 ,ALEXANDRIA, EGYPT.

Tel: +20 3 3832405 , +20 3 3832406 Fax: +20 3 3808003  
E-mail: [sales@mada-trade.com](mailto:sales@mada-trade.com)  
<https://www.mada-trade.com/>



Technical Data Sheet (TDS)

