

Cocoa Mat by Matter Surfaces Installation Instructions

Adhesive	MI 3500; 170 - 220 ft ² / gallon
Minimum Subfloor Temp	≥60°F
Minimum Ambient Temp	≥65°F
RH	Up to 100% RH and 25 lbs. MVR
Acclimitization	≥24 hours at 70°, under the conditions described in section (1) below.

1 GENERAL

These have been developed to offer the best opportunity for proper and successful flooring installation, and any deviation may result in failure. Installation instructions, all Safety Data Sheets (SDS) and label instructions must be read, fully understood and followed. For all situations that are not covered in this document, please contact Matter Surfaces.

Cocoa Mat does have an expansion factor under certain moisture conditions. In some cases significant moisture may cause some minor bubbling of the surface. Under ordinary conditions this would not be to an extent to cause a tripping hazard and this minor bubbling would disappear shortly under drying out of the material.

In small areas of installation (sizes which can be easily removed for cleaning) the material may be laid loosely on a smooth sub-floor providing it has an adequate expansion gap allowed during installation around its perimeter to allow for the expansion under high moisture conditions.

When the Cocoa Mat is 100% saturated, the expansion will be about 1/16 inch per 12 inches of length and width. Therefore, as an example, if 12 feet long it could require approx. ¾ inch of an expansion gap under totally saturated conditions. This can be expected for exterior installations or where the material is exposed to water. Expansion does not occur immediately when wet, it may take several hours to fully expand.

Should any bubbling occur, then it may be alleviated by washing or soaking the entire mat with clear water, which will cause an overall uniform expansion eliminating the ripples or bubbling of the surface.

When the Cocoa Mat dries thoroughly after expansion through water saturation, it will return to approx. 90% of its original size. If the mat is re-saturated it will then again expand to the maximum dimensions to which it had originally expanded when soaked. This expansion and contraction factor must be taken into consideration with any loose laid installation, particularly in large areas where the possibility of heavy moisture conditions exist.

In large areas where substantial moisture is anticipated it is recommended to use Mapei G19 adhesive, following the adhesive manufacturers written application instructions to fully adhere the Cocoa Mat to a properly prepared substrate as defined by *ASTM F710 Standard Practice for Preparing Concrete Subfloors to Receive Resilient Flooring*. **Note:** For this type of application, if required, an exterior grade patching or leveling compound is recommended. This information is based on extreme wet conditions.

Thermal expansion is minimal and it is normally not necessary to take this into consideration when fitting mats in mat wells or recesses, etc. Extremely cold temperatures will reduce the flexibility of Cocoa Mat. If handling is necessary during subfreezing temperatures it should be done with caution as extreme bending of the backing may cause cracking.

Natural color Cocoa Mat is made of coir (coconut fiber) yarns containing no dyes, bleaches or coloring agents. At times there may be a natural variation of the color of the Cocoa Mat; this is a characteristic of the matting and is not a defect. This may appear as streaks of various shades on the mat surface but in no way will it affect the life of the product. These streaks are attractive and add to the appeal of the natural fiber product.

No color dye or coloring process for Coir is fade proof or color fast. When exposed to natural light or UV the colored matting will fade depending on the amount of exposure. **Note:** We cannot warrant that any dyed material we produce will not fade and therefore do not consider fading as a product defect.

Shedding condition is not a product defect, but natural with new mat installations. This condition will be minimal after use and vacuuming several times.

The following factors regarding the installation procedures of the Cocoa Mat must be taken into consideration by the installers:

1 Conditioning

During the manufacturing process Cocoa Mat is rolled up under tension so as to eliminate roll telescope and any handling problems. This results in some stretching of the backing from its original manufactured “un-stretched” size. Upon unrolling of the material some initial shrinkage may occur. This is why the Cocoa Mat must be unrolled, laid flat and upside-down to acclimate at its service condition (approx. 70° F) for a minimum of 24 hours before cutting to size.

2 Cutting

Cut only after proper acclimatization of the mat. Always cut the back of the Cocoa Mat using a sharp bladed utility knife and a straight edge; do not face cut as you will damage the pile.

3 Seaming

For large installations where seaming is required it is necessary to perform this on the job site because of shipping and handling with the heavy material. We recommend using our own seaming method, utilizing thin vinyl tape and the “solvent system”. However many installers prefer their own methods that they are familiar with such as Heat Seaming methods used for carpet installations. These installations may prove satisfactory but we cannot offer any warranty for these procedures.

4 Fully Adhered

If required, fully adhere the Cocoa Mat (in non-extreme wet conditions) using MI 3500 adhesive over a properly prepared substrate as defined by *ASTM F710 Standard Practice for Preparing Concrete Subfloors to Receive Resilient Flooring*.

On and below grade concrete subfloors require a confirmed effective vapor retarder with a low permeance (≤ 0.1) having a minimum thickness of 10 mils, or meeting the requirements of *ASTM E1745 — Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs*. Confirm it was placed directly underneath the concrete, above the granular fill. If this is not possible then a topically applied moisture mitigation system that conforms to *ASTM F3010 – Standard Practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings* must be applied following the manufacturer’s written instructions.

Moisture testing is mandatory following the protocol of *ASTM F2170 – Standard Test Method for Determining Relative Humidity in Concrete Slabs using in situ Probes*, regardless of grade level or whether the concrete is freshly poured or classified as an older slab. It is the responsibility of the General Contractor/End User to have the concrete subfloor tested for moisture. It is the responsibility of the Flooring Contractor to request the moisture test results prior to installing the flooring, or they may wish to perform the testing themselves. It is also recommended that an International Concrete Repair Institute (ICRI) Tier 2 Certified Technician performs the moisture testing. If for any reason you are unable to drill into the subfloor, contact a Matter Surfaces representative.

The test results must not exceed the maximum acceptable relative humidity for the adhesive. If test results exceed the maximum relative humidity, the installation must not proceed until either the subfloor dries to an acceptable level or an effective mitigation system is used that conforms to *ASTM F3010* is installed following the manufacturer’s written instructions.

Test methodology, results and photographs must be documented and provided to the flooring contractor, General Contractor, owner and/or architect. Providing the moisture test results are acceptable to both Matter Surfaces and the adhesive manufacturer then the installation may proceed.