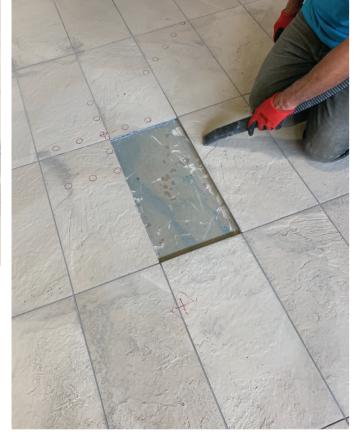




works for the process







Tile Management System by NUE TILE

# **DemoFlex**

# 'Tile Management System' components:

DemoFlex TMS, DemoFlex TMS Plus, DemoFlex Adhesive, DemoFlex Tape (or caulk)

#### Manufacturer:

NUE TILE LLC 1879 Whitehaven Rd #144 Grand Island, NY 14072 1.800,686,9158



## **Product Data Spec Sheet**

**For Use:** Under Ceramic Tile & Stone or LVT/LVP floor coverings, interior-use, Com2/Res2 environmental exposure areas (non-submerged)

## **Product Description:**

A 3-part crack-isolation membrane underlayment designed to be used under ceramic tile floor installations in interior environments. The system consists of: DemoFlex Adhesive, the User's choice of DemoFlex TMS or TMS Plus Membranes and the included DemoFlex Tape for seams/perimeter or your caulk/sealer. Apply the tile's mortar bond coat or the LVT/LVP install method directly above DemoFlex. Remodel your tile floor in a fraction of the time...

The 'Tile Management System' allows for 10X Faster Tile Removal with virtually No Dust exposure. Cracked tile protection with sound deadening performance for hotel guests & tenants alike!

Fix those ugly, broken tiles with ease! Only when force is applied by the user to remove or repair the tile floor, the DemoFlex Membrane, Mortar and Tile all come up intact with extremely "non-detectable" Silica dust released into the air. While protecting their organization, employers can also avoid some extra problems, costs and penalties associated with the control methods required by OSHA's Crystalline Silica Exposure regulations...it's like having beautiful tile insurance without the annual fees. DemoFlex is highly water resistant, but is not intended for use in fully submersed areas.

## Mortar & Grout Compatibility:

Major Manufacturers meeting ANSI: A118.4 & A118.6 & ISO: 13007, C2 & CG1 (or better)

#### **Suitable Substrates:**

- Concrete Slabs
- Exterior Glue Plywood (sanded face up) & EG/LWP
- Radiant Heated Floors (prefilled)
- Sealed Gypsum/'Lightweight Concrete' (no extra primers)
- Ceramic Tile, Natural Stone, Terrazzo (no scarifying)
- Polished Concrete (no scarifying)
- Tile Floor Backer-Boards & Uncoupling Mats (prefilled)
- Cement Leveling & Patch Compounds
- Bonded Cement Mortar Beds
- Existing VCT or VAT, Corian and Steel (no extra primers)

## Advantages:

- 10X Faster Tile Demo than Traditional Installation Methods
- Crack-Isolation & Sound Deadening Technology
- Dust & Silica Mitigation During Tile Floor Demo
- No Damage to Radiant Heating Systems
- Repair Broken Tile Quickly With Little Mess
- Easy Installation & Set Tile Immediately Following DemoFlex

# DemoFlex System Options & Sizing:

TMS Plus (DF Tape included) 0.43lb/ft² or 0.19kg/m²

11110 1 100	(Di Tape Illiciudeu)	0.431b/11- 01 0.19kg/111	
Membrane Size	Format	Format	
Coverage	150 SQ. FT.	300 SQ. FT.	
Length x Width	36" x 50'	36" x 100'	
Thickness	1mm (0.04")	1mm (0.04")	
Crack-Suppression	up to 3/8" in-plane		
Environmental Class.	Waterproof & Alkali Resistant – Com2/Res2		
Tile/Stone Sound Perf.	STC:66 - IIC:66 - ΔIIC:22 (6" slab/ceiling)		
LVT/LVP Sound Perf.	STC:66 - IIC:71- \( \Delta \text{IIC:25 (6" slab/ceiling)} \)		
Traffic Class. (C627)	Lt. Commercial		
Water Vapor T.R.	≤0.09 perms		

**TMS** (DF Tape included)

0.83lb/ft<sup>2</sup> or 0.36kg/m<sup>2</sup>

Membrane Size	Format	Format	
Coverage	150 SQ. FT.	300 SQ. FT.	
Length x Width	20" x 90'	40" x 90'	
Thickness	0.5mm (0.02")	0.5mm (0.02")	
Crack-Suppression	up to 3/8" in-plane		
Environmental Class.	Moisture & Alkali Resistant — Com2/Res2		
Traffic Class. (C627)	Heavy Commercial		
Water Vapor T.R.	0.4 perm		

# **DemoFlex**<sup>™</sup> **Tape** (included)

2" X 180' - Moisture & Alkali Resistant - Com2/Res2

# **DemoFlex** Adhesive



150 SQ. FT. Coverage per Adhesive Spray Can

MVER up to 8 lbs/1,000 square feet per 24 hours

0.020 g/ml VOC content 95% RH/11pH

#### **Technical Standards:**

ASTM: C627, E96, F2170, F1869, F710, C834, C1193, C919, C482-02, D4068-01 EJ171, STC: E90, IIC: E492, ΔIIC: E2179 – TCNA F125-17 – ISO: 13007, C2 & CG1 ANSI: A108.17, A118.12.5, A118.10.4.5, A118.13, A118.4 & A118.6 – EPA: 8260B

conintion

Description:	Demoriex Twis/Plus	the alternative method	
mortar bond to tile	NOT unlockable	NOT unlockable	
mortar bond to membrane	NOT unlockable	NOT unlockable	
membrane/tile installation bond to floor substrate	UNLOCKABLE	NOT unlockable	

# Membrane & Seam Tape - Construction:

The TMS & TMS Plus multi-layer membranes were designed for optimal: tensile, shear & compressive strength with strong bonding characteristics to mortar. Acid-free fiber production with advanced polyolefin & scrim combinations provide the proper alkali, moisture & sound resistant characteristics to withstand mortar alkali & Com2 environmental exposure for many years of use.

Permanent mortar bond to the tile and membrane – Smarter membrane bond to the floor... DemoFlex was designed to compliment & enhance the other technologies & methods that make tile/stone the best floor covering option. Achieving a stable bond to the tile with proper support while accounting for slight undulations in the floor's surface are part of what makes mortar so critical to the installation. NUE TILE has pioneered a smarter bonding configuration that allows the mortar's bond to the floor to provide only what the user has in mind.

#### Adhesive - Formulation:

NUE TILE developed this optimal adhesive formulation specifically based on existing adhesive technology and production methods successfully in use in similar industry applications for many years. Achieving the proper bonding strength for long-lasting performance while providing the ability to Unlock the tile assembly during demo is something no other tile floor can offer. Outstanding moisture & alkali (pH) resistance with quick & easy spray application in an inexpensive, recyclable package that provides a safe user experience even in sensitive environments is important to its design. However, temperature and humidity can affect floor leveling & patch compounds' curing time which may require 5-72 hours of drying prior to applications of materials above them and therefore, floor leveling & patch compound manufacturer's curing time specifications for "moisture sensitive floor coverings" prior to application of DemoFlex should be followed to ensure DemoFlex Adhesive a properly dry surface to achieve a stable bond.

## **Performance Test Results:**

ASTM C627 'Robinson' (TCNA performed):	Re	Results	
DemoFlex TMS – Over Concrete		Extra Heavy	
DemoFlex TMS Plus – Over Concrete	Lt. Cor	Lt. Commercial	
DemoFlex TMS – Over Existing Polished Tile (without filing grout join	ts) He	eavy	
DemoFlex TMS – Over Electric Radiant Heat	No Cor	npromise	
DemoFlex TMS – Over Exterior Plywood Underlayment (plywood/OSB subfloor)		No Compromise	
DemoFlex TMS - Over Typical Backer-Boards & Uncoupling Mats	No Cor	mpromise	
System Crack Resistance (TCNA performed):		sults	
DemoFlex TMS – Standard ANSI 118.12.5.4.1		rformance	
DemoFlex TMS - Modified ANSI 118.12.5.4.1 (start w/ existing 1/16" crack)		rformance	
DemoFlex TMS Plus – Standard ANSI 118.12.5.4.1		rformance	
Moisture Resistance (TCNA performed):		sults	
TMS & TMS Plus – Waterproofness 118.10.4.5 / ASTM D4068-01	No moisture pe	moisture penetration	
DemoFlex TMS Plus: E96 Moisture Vapor Transmission Rate		≤0.09 perms	
DemoFlex TMS: E96 Moisture Vapor Transmission Rate		0.35 perms	

Sound Isolation Performance (TMS Plus)	Tile/Stone on Plywood/Gypcrete	Tile/Stone on 6" Concrete	LVT/LVP on 6" Concrete
STC (sound transmission)	59	66	66
IIC (impact insulation)	52	66	71
ΔIIC (delta IIC)	_	22	25

## A. Clean Substrate



# **B. Spray DF Adhesive**



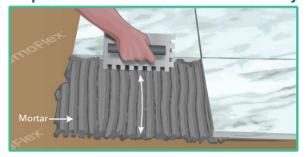
# C. Press DF Underlayment into DF Adhesive



# D. Tape or Caulk Seams & Perimeter of DF



## E. Spread Mortar onto DemoFlex Immediately



#### F. Set Tile & Grout per industry standards



# Installation & Substrate Preparation Techniques for DemoFlex Adhesive, TMS Membranes & Seam Treatment

see also: ANSI 108.17, ISO 13007, TCNA F125A, EJ171 & other applicable Installation Methods:

- Complete all standard surface preparation procedures prior to DemoFlex.
- Allow for proper curing/drying of all substrates; leveling & patch compounds.
- Applying SCP-327 to new concrete at time of concrete placement can allow for install of DF & Tile as early as 14 days after the placement of new concrete (consult manufacturer).

All substrates must be structurally sound, dry, clean & free of dirt, oil, grease, curing compounds, paint, laitance or efflorescence. Refer to TCNA Handbook for product selection, installation methods & testing standards; following manufacturer's specs prior to application of DemoFlex. Maintain specified movement joints. See 'Radiant Heat' & 'Sound Deadening' sections to follow. Make rough or uneven surfaces (e.g. deeply textured 'Tile Over Tile' applications) to obtain an 'ICRI' Concrete Surface Profile: a CSP—2 using preferred method or self-leveling underlayment. Prior to DemoFlex: apply Floor Leveling & Patch Compounds allowing for curing time of patch and leveler based on manufacturer's "moisture sensitive floor covering" curing time specs.

If using plywood as tile underlayment: Use sanded face up, exterior glue panels to achieve the tile/stone's TCNA deflection resistance & APA (Q225G) load capacity. Check & adjust subfloor for flatness within ANSI A118 standards & clear debris. Protect & aclimate plywood prior to installation. Do not use adhesive below plywood underlayment. Run panel strength/grain axis perpendicular to joists leaving 1/8" panel gaps (not filled), w/ ≥12" panel offset to subfloor panel joints and no less than a 1/4" gap around perimeter. Apply corrosion resistant fasteners to APA schedules (E30): using fastener length to equal the combined thickness of subfloor and underlayment; NOT penetrating into joists. Apply DemoFlex (see below). If fastening through DemoFlex, drive to slightly countersunk to panel height and seal holes to desired class. If sanding plywood joints after DF, replace & seal affected DemoFlex. Apply Leveling/Patch compound over DemoFlex w/ plywood underlayment.

- **1.** 68 degrees F (20 C) is the ideal temperature for DemoFlex to be applied and should not be applied below 61 degrees F (16 C) or above 95 degrees F (35 C). Use of fans is recommended.
- 2. Substrate must be structurally appropriate to accept ceramic tile and prepared in accordance with ASTM & TCNA standards. Ensure a CSP–2 or smoother surface profile & allow floor leveler/patch to be fully cured (fast setting if suitable). The substrate must be clean, dry and free of dust/debris. Remove or neutralize any residues by scratch coating with patch/leveling.
- **3.** Lightly damp-mop the substrate if dust is present after sweeping/vacuuming. Wipe hand across surface; if dust transfers, the substrate is not clean enough.
- **4.** HVAC must be continuously operated for a minimum of 72 hours no less than 68 degrees F (20 C) prior and the TMS must be stored at 68 degrees F (20 C) for 24 hours prior to application.
- **5.** Protect walls and perimeter from over-spray with a spray shield, drop cloths, paper or masking.
- **6.** Shake DemoFlex aerosol spray adhesive can vigorously. Remove cap and test spray pattern.
- 7. From an upright, standing position: aim the Adhesive can downward at the floor approx. 20-30" (50-70cm) up from the substrate and press the side of the applicator tip. Adhesive should spray out in a wide, thick mist and fall similar to snow. Apply the Adhesive around the perimeter of the installation area first then go to the farthest point of the room filling in the field of the floor, working your way out of the room. Achieving adhesive spray coverage of 20-40% onto the entire surface of the floor substrate is ideal. See sample image on DF Adhesive can. Excessive Adhesive coverage percentage beyond 40% will not increase bonding strength.
- **8.** If the Adhesive does not achieve a wide mist spray pattern, shake can vigorously again, but changing to the provided replacement applicator tip may be required by pointing the DF Adhesive can in a safe area then pulling off the clogged tip and pushing the new tip into place. If the DF Adhesive can is stored for an extended period of time, remove adhesive build up from the spray tip. Inserting a pin into the tip can help to prevent clogging during extended storage times.
- **9.** If over-spray occurs, quickly remove it with a damp cloth while the adhesive is still wet.
- 10. Allow DemoFlex Adhesive to become tacky until there is no adhesive transfer when lightly touched with your fingers (approximately 20-30 minutes). Humidity and temperature can affect the activation time of the Adhesive, but a fan can be used to effectively reduce the tacking/activation time of the DemoFlex Adhesive.
- 11. Pre-cut easily manageable length pieces off the roll of DemoFlex Membrane (and proceed to securely press the Membrane into the DemoFlex Adhesive within 3 hours of adhesive becoming fully tacky, preventing dust/debris contamination to the adhesive). Start at the doorway as you lay the pre-cut pieces into the DemoFlex Adhesive, leaving 1/8" to 1/4" gap between the sheets or overlap the sheets slightly and cut off the overlap portion. Place large pieces along the walls, placing smaller fill pieces in the center/field. It is acceptable to walk on the Membrane as soon as it is placed into the Adhesive. Thoroughly press the entire surface of the membrane into the adhesive by any means; using a hand roller or weighted roller, by hand/foot or a grout float within 1 hour after installation to complete the bonding process.
- 12. Bridge the seams of the TMS/TMS Plus Membranes and around the perimeter of the installation areas using DemoFlex Tape or DemoFlex Caulk; spanning approximately 1" onto each sheet/surface. Seal/waterproof further if desired. The installation is ready for mortar/tile...

**Sound Deadening/Isolating with TMS Plus** (per C919): To isolate wall vibrations from floor installation; seal gaps (C834) or wrap TMS Plus up wall 2-3" & adhere. Treat substrate cracks, perimeter of floor and gaps between (covered) pipes that run through floor using sealant and/or TMS Plus. Do not screw/nail through TMS Plus, if so, drive to substrate height & seal over fastener holes with C834 sealant flush with TMS Plus.

Installing Over Existing Cracks (F125/F125A-Full/Partial): DemoFlex is optimal if applied to the entire surface, but can be applied only over existing cracks. Be sure to follow TCNA F125. Repair all structural, vertical cracks prior to installation of TMS & Tile/Stone. For use over existing cracks; not greater than 3/8" wide, cover both sides of the crack with 3X the width of the tile in DF TMS. Use sealant on grout joints spanning the crack.

## Installing Over Radiant/Electric Heat (RH110-RH117):

- **A.** Install the heat system as instructed by the manufacturer's specifications. **B.** Apply approved fill coat over the heat system with a smooth mortar or a self-leveling compound to manufacturer's specs so the surface is flat w/ out deep textures, large gaps or cavities to a CSP–2 or smoother surface profile. **C.** Allow the fill coat or self-leveler to cure (up to 72 hours).
- D. Due to shrinkage potential of some fill coat materials upon curing, an additional, thin scratch coat of the same material may be necessary to ensure the surface is smooth and flat along with scraping any burrs.
- **E.** After the additional scratch coat is thoroughly dry, apply the DemoFlex Adhesive and install the DemoFlex Membrane & seam/perimeter treatment, then proceed installing the mortar, tile & grout per the TCNA Handbook. **F.** After proper installation of DemoFlex & Tile; repair or replacement of the Membrane & Tile with NO damage to the heat system is possible; carefully remove grout/tile maintaining shallow angles of removal tools (continued).

## Heavier Mositure Exposure Areas (greater than Com2):

If Com3 level waterproofing is desired, it must be clearly specified. Refer to TCNA Standards for material selection and installation methods for Com3 or higher environmental exposure areas like fully submerged showers or ones with extended exposure to standing water. In areas adjacent to Com3 or in Com2 environments with a heightened concern for moisture resistance during maintenance for example; TMS Plus is recommended. Be sure to coat all seams & perimeter of DF Membrane sheets with sealant of C834 or higher following Guide C1193 or liquid waterproofing based on manufacturer's specifications. Leave the Membrane 6-12" away from the perimeter walls and doorway entrances. Repair any damaged membrane prior to tile.

#### Tile Installation Recommendations (see TCNA Handbook):

DemoFlex can be walked on immediately, but is not a wear surface and can be damaged prior to the installation of the mortar and tile. It is recommended to only install as much DemoFlex TMS as will be immediately followed by mortar & tile installation. Proceed to install ceramic tile or stone immediately according to industry standards. For the mortar bond coat, high quality mortars are recommended to set tile, but anythin, medium or LFT mortars meeting ANSI 118.4 or ISO C2S1 or better are acceptable. Mix mortar according to manufacturer specifications. Clean the backs of the tiles so they are free from dust/debris. Use the proper notched trowel to maximize coverage of mortar bond coat under the tiles and along all edges and corners. Use flat side of the trowel to 'key' the mortar into the DemoFlex Membrane. Back-butter/scratch-coat the back of the tiles with mortar. Comb the mortar with the trowel marks all in the same direction, perpendicualr to the leading edge of rectangular tiles. Perpendicular to the ridges of the mortar; thoroughly press the tile back/forth into the mortar to force air bubbles out achieving proper coverage and support of the tile. Check below tiles for TCNA recommended coverage percentage based on the application. The use of tile leveling/spacer system can aid in minimizing 'lippage' along the edges of the tile. Remove excess mortar off of the TMS before the mortar dries. Be sure to clean the mortar out of the grout lines so the proper amount of grout can be installed between the tiles. Larger tiles may have extended mortar curing times; adjust traffic & furniture use accordingly.

## Tile Repair, Removal or Replacement of Floor

DemoFlex TMS allows for 10X faster removal of the entire tile floor or individual, broken tiles with no damage to the substrate below with virtually no dust exposure. Be careful to protect surrounding areas or unaffected tiles from tools and debris. To repair small amounts of tiles that are chipped or broken, start by removing one grout line by hand, carefully wedge a prybar or the like under the tile, mortar and TMS Membrane at as shallow an angle as possible by applying force at the leading edge of the tile then lift vertically to unlock the tile assembly from the substrate. Avoid breaking tiles during removal. If removing the entire tile floor, start as rapidly as preferred, using the most effective/powerful demo tools available.

#### Cleaning & Re-Application of TMS During Replacement:

DemoFlex Adhesive can be cleaned with a damp cloth or damp sponge within initial 3 hour working time. Shield the walls/perimeter from over-spray. If small amounts of water is spilled onto the TMS/TMS Plus prior to tile installation, blot it up with a towel or sponge. If Membrane is damaged or if significant water is spilled onto the DemoFlex TMS prior to mortar/tile installation, remove membrane in the affected area, clear debris, dry area and replace with new membrane (see step 2). **During repair/removal of the tile-mortar-DemoFlex TMS floor system; after removing debris with a floor scraper, DemoFlex Adhesive will bond to leftover, cured DemoFlex Adhesive.** Replacing DemoFlex TMS/TMS Plus Membrane requires re-application of DF adhesive (see step 2).

# Movement - Expansion Joints (see EJ171 for guidance):

Maintain specified movement joints; not less than 1/4" perimeter joints. Do not install DemoFlex over movement joints. Use Class 25 Sealant of ASTM C920 to ASTM C1193 standards. **Frequency of Interior Joints:** No more than 25' in each direction. Above grade concrete substrate OR interior tilework exposed to direct sunlight or moisture: no more than 12'.

## Storage & Shelf-Life:

DemoFlex Adhesive must be stored at minimum 50°F and maximum 120°F. Adhesive can must not be allowed to freeze. Adhesive must be maintained at a minimum temperature of 68°F for a period of 24 hours prior to use. The product may be stored for up to 3 years from date of manufacture prior to use.

#### **Limitations** (see full warranty for details):

- Finished plank hardwood floor covering, particle board, luan, sheet vinyl or linoleum, OSB and masonite are not suitable substrates for Ceramic Tile or Stone Floor Installations and therefore not for use with DemoFlex.
- Installation must not exceed 95% Relative Humidity or 12 pH.
- Moisture vapor emissions (MVER) do not exceed 8 lbs/1,000 square feet per 24 hours in accordance with the most current ASTM F1869.
- Cracks must not exceed 3/8" (3mm) in-plane. Any cracks vertical/structural in nature are not warranted (must be repaired prior to DemoFlex install).
- DemoFlex is not intended for use in fully submersed "wet" areas of Com3/Res3 or greater exposure (only adjacent to Com3 is acceptable).
- Do not apply DemoFlex without perimeter & field expansion/movement joints (see EJ171) resulting in shear forces transferring to the tile/stone.
- Failure to allow concrete slabs, floor leveling & patch compounds to properly dry/cure prior to installation of DemoFlex shall void the warranty.
- Do not fasten ply' underlay' into joists through subfloor. Do not glue ply' underlay' to subfloor. Must have offset, gapped 2 layers: subfloor & underlay'.
- DemoFlex is not a wear surface and can be damaged prior to the installation of the mortar and tile above (repair/replace prior to tiling).
- Insufficient mortar bond to the ceramic tile or stone (ASTM C482-02) may result in inconsistent tile/stone demolition performance.
- NUE TILE covers labor & materials used in replacement or repair of the **affected areas only**, up to amount not exceeding price paid by customer.

# **NUE TILE**

hundreds of thousands of square feet successfully performing across the United States since 2014











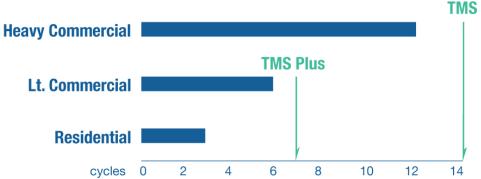
# Traffic Load Classifications: ASTM C627 'Robinson' Test

Ceramic tile & stone installations can provide the strongest durability of any floor covering and determining what different installation materials and methods can provide is quantified by the 'Robinson' Test. Traffic loads are broken down into 5 levels shown on the right.

The test rig simulates up to extreme levels of traffic weight and abuse to determine the suitability of different products/methods for different applications like residential kitchen floors up to warehouse tile floors. Through a series of different hardness levels of the wheels contacting the tile from a soft rubber wheel to hard rubber then steel wheel, the test rig completes hundreds of revolutions over the tile/grout per cycle. As the cycles climb, heavier amounts of weight is added to the test rig simulating harsher environments.







Optimal Vertical Bonding Force

Maximum Tile Bonding Force

Horizontal System Crack Resistance

Does your mechanic weld your car's wheels directly to the axel?

Does the plumber permanently weld a toilet to the plumbing flange?

...if they did, it would cost you a LOT more money for new ones

Why give customers more reasons to try LVT or LVP?

# MultiBoard Plywood Backer with TMS Technology:

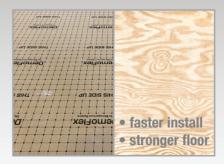
# 2X FASTER TO INSTALL WITH MUCH HIGHER LOAD CAPACITY

- Easily Meet Project Deadlines
- No Mortar Needed Below MultiBacker
- Only Tile Backer-Board That Adds Strength
- Quieter Nights Sleep with Sound Isolation
- Repair Broken Tiles or Wrong Colors Quickly
- Material Costs Proportional to Alternatives

TCNA's Typical Subfloor/Underlayment Recommendations
Residential Traffic: 550PSF for Tile or 825PSF for Stone

TCNA's Typical Subfloor/Underlayment Recommendations
Commercial Traffic: 750PSF for Tile or 1,125PSF for Stone





**NUE TILE's LF980 Plywood Backer-Board with TMS Technology:** 

LF980-60 over 3/4" OSB subfloor: 715PSF total

LF980-200 over 3/4" OSB subfloor: 855PSF total

LF980-330 over 3/4" OSB subfloor: 985PSF total

LF980-520 over 3/4" OSB subfloor: 1,175PSF total



Other Backer-Boards (Concrete/Fiber/Gypsum) or Uncoupling Mats: Board/Mat + Mortar required below: 655PSF over 3/4" OSB subfloor

- 'PSF': Pound per Square Foot for load span achieved
- Loads in PSF apply only to the floor panel system, NOT to the design of the floor joists
- Capacity of floor panel systems is based on analysis of the L/360 uniform load capacity
   Based on APA form Q225 for load spans
- Assumes two layers with the strength axis (grain) of both layers perpendicular to joists
   Loads are guidelines only and performance level is not guaranteed

# NUE TILE



help isolate these noises from the guests below...

# with an:

- 66 STC 66 IIC 22ΔIIC
   6" concrete slab with ceiling
- 59 STC 52 IIC plywood & gypcrete with ceiling

using

**DemoFlex**\* TMS Plus

# "Non-Detectable" Levels of Respirable Silica Exposure During Tile Demo...

as confirmed in field testing by a neutral, 3rd-party organization, Great Lakes Environmental & Safety Consultants, Inc. means that employees could theoretically remove floor tile 24/7 without reaching OSHA's PELs and the restricted work areas are not necessary



'non-detectable' silica exposure during tile demolition & repair work is achieved by using DemoFlex TMS because the mortar is encapsulated between the TMS and the tile or stone

...no grinding & virtually no dust





# With Less Need for:

- Restricted Work Areas
- Medical Monitoring Employees
- Extra Ventilation Strategies
- Custom Respirator Systems
- Misc. Engineering Controls
- OSHA involvement



DemoFlex™ Underlayment & DemoFlex Sound Underlayment Limited Warranty Coverage Subject to the conditions and limitations stated below, NUE TILE LLC ("NUE TILE") warrants that DemoFlex will be free from Manufacturing Defects and will not break down, deteriorate or delaminate due to adhesive bond failure under normal usage for a period of time, not to exceed twenty five (25) years from date of sale, or thin set warranty language, whichever is less that is used to bond the ceramic tile or stone to the DemoFlex membrane, PROVIDED that only modified thinsets are used and that the substrate upon which the adhesive is applied complies with all of the following conditions at the time of installation and for the entire term of the Warranty, along with meeting specific industry standards as set forth by the Tile Council of North America (TCNA) and the American National Standards Institute (ANSI) for the installation of ceramic tile and stone.

- 1. Does not exceed a Relative Humidity (RH%) of 95% when tested in accordance with the most current ASTM F2170; AND
- 2. Moisture vapor emissions (MVER) do not exceed 8 lbs/1000 square feet per 24 hours when tested with prepackaged Calcium Chloride crystal tests in accordance with the most current. ASTM F1869; AND 3. The pH does not exceed 11 when tested in accordance with the most current ASTM F710; AND
- 4. If the substrate fails to meet the moisture and pH requirements as stated above;  $\ensuremath{\mathsf{AND}}$
- 5. If your thinset of choice fails to bond to the ceramic tile/stone, which includes but is not limited to using a beating block and rubber mallet to properly imbed the tile into the thinset, the warranty from NUE TILE shall be void.

Remember moisture and pH testing can only indicate the conditions present at the time of the test, and cannot predict any future changes. NUE TILE does not monitor conditions at the location where its products are used and has no control over any future fluctuations of the environment where the adhesive is used; therefore, NUE TILE cannot be responsible for failures or delamination due to future changes in moisture and pH. Please keep in mind that in accordance with normal industry standards, it is NOT recommended to install ceramic tile on concrete that has Hydrostatic pressure.

#### Disclaimer

THIS LIMITED WARRANTY IS GIVEN IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES BASED ON SAMPLES OR ORAL STATEMENTS, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS DOCUMENT. IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE OR LOSS IS SPECIFICALLY EXCLUDED AT ALL TIMES. THERE ARE NO WARRANTIES BEYOND THIS EXPRESS WARRANTY. NUE TILE EXCLUDES ANY LIABILITY FOR LOST PROFITS OR ANY OTHER INDIRECT SPECIAL OR CONSEQUENTIAL DAMAGES. THE REMEDIES CONTAINED HEREIN ARE THE ONLY REMEDIES AVAILABLE FOR BREACH OF THIS WARRANTY.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied Warranty lasts, so the above limitations or exclusions may not apply to you. These limited warranties give you specific legal rights and you may also have other rights, which vary from state to state. Except for these other rights, the remedies provided in the above warranties state the limit of NUE TILE's responsibility. No representative, employee, or agent of NUE TILE is authorized to modify or change the limited warranties as stated herein. NUE TILE excludes and will not pay consequential or incidental damages under these limited warranties. By this we mean that NUE TILE will not cover or pay for any loss, expense, or damage other than to the floor covering itself that may result from a defect in the adhesive. Some examples of consequential or incidental damages are: replacement of the substrate, trim moldings, disconnecting/reconnecting appliances or fixtures, or moving of furniture. If the adhesive was installed in a commercial application, this means that NUE TILE will not cover or pay for any loss, expense, damage, or loss of profit arising from inability to use the premises because of defect in the adhesive.

#### **Performance**

DemoFlex Underlayment will not delaminate due to adhesive bond failure when used in strict compliance with the latest instructions and guidelines produced and provided by NUE TILE regarding the Product's suitability, use of materials in conjunction with the Product, including but not limited to the substrate and/or any other materials which could affect performance of the product, and preparation and installation procedures. Failure to follow those guidelines and specification or failure to comply with any usual and customary building standards, local, state or federal laws and/or any applicable building or construction codes will void this Warranty. Do not apply DemoFlex without perimeter & field expansion/movement joints (see EJ171) resulting in shear forces transferring to the tile/stone. DemoFlex Adhesives are warranted from Relative Humidity (RH%) up to 95 % when tested in accordance with the most current ASTM F2170: and moisture vapor emissions (MVER) up to 8 lb per 1,000 sq ft per 24 hours when tested with a prepackaged calcium chloride crystal kit performed in accordance with the most current ASTM F 1869; and not exceeding a pH of 11 when tested in accordance with the most current ASTM F710. Moisture testing can only indicate conditions at the time of the test and cannot predict any future changes in moisture levels. NUE TILE cannot be responsible if moisture levels change in the future. If moisture levels during the course of the Warranty period exceed those listed above, the Warranty is void.

#### **Exclusions**

This Warranty shall not cover installations that do not meet common & customary structural and industry standards of substrate preparation and ceramic tile installation procedures as set forth in The Tile Council of North America's handbook and the American National Standards Specifications for the Installation of Ceramic Tiles (ANSI 108). If the areas to which the products are applied now or in the future fail to meet these standards, this Warranty shall be void. NUE TILE shall not be responsible for delamination which results from the failure of any another component of the installation which results in the delamination of the Product. NUE TILE shall NOT be responsible for delamination due to any of the following: (a) Structural failure, seismic action, dimensional instability of floor covering material, tile warpage, discoloration, caustic solutions entering the system topically through the joints, voids, water leakage; AND/OR (b) Failure caused by the use of incompatible curing compounds, mold release agents, non-portland cement based leveling or patching compounds of any kind (unless specifically approved in writing by NUE TILE); AND/OR (c) The area of installation is subject to water damage, flooding or immersion in water due to any cause, such as plumbing failures or roof leaks AND/OR (d) Product was allowed to freeze prior to use; AND/OR (e) Cracking due to structural movement, excessive deflection or other failure in the substrate; AND/OR (f) Use of NUE TILE's adhesives that appear to be defective or do not meet normal expectations for use or appearance or is obviously defective in some way if a normal user of the product would have determined that the adhesive was defective (See Workmanship Section below); AND/OR (g) Improper preparation or installation or maintenance procedures, and any other condition beyond the control of NUE TILE; AND/OR (h) Failure caused by the use of oil or wax-based floor sweeping compounds AND/OR (i) Failure caused by the use of flooring strippers (especially those containing benzyl alcohol); AND/OR (j) Failure caused by the use of asbestos abatement chemicals.

#### Workmanship

While NUE TILE provides information and training as to the use of the Product to installers, NUE TILE does not warrant the installer's workmanship. Workmanship errors, like poor floor preparation or poor material installation, should be addressed to the contractor who installed the surface. Installer/Applicator must perform installation with skilled, experienced and trained workmen supervised by properly trained personnel who have demonstrated expertise in installations of similar size and scope. NUE TILE does not cover losses which result from the use of the Product if the Installer or contractor knew or should have known that the Product suffered from a manufacturers defect and was not suitable for use. NUE TILE does not have an employee or contractual relationship with contractors and does not supervise, direct or in any other way control the performance of the contractors or subcontractors used during installation.

# **NUE TILE**

#### **Shelf Life**

The Product may be stored for a period of up to 3 years from date of manufacture prior to use. During that time, the Product is warranted to be free from defects in material and workmanship when handled, stored, and transported as specified by NUE TILE.

Notice: Adhesive should be stored at a minimum of 50°F and a maximum of 120°F at all times. Adhesive should not be exposed to freezing temperatures. Adhesive must be maintained at a minimum temperature of 68°F for a period of 24 hours prior to use. Allowing any portion of the Adhesive to freeze will void this Warranty. Please see the complete Product information for details on storing and handling the Product prior to use.

#### Claims & Remedies

Contact NUE TILE immediately upon the discovery of any situation which may give rise to a claim under this Warranty. Repairs or replacements made without an approved claim, in writing, from NUE TILE will not be reimbursed and the Warranty shall be void. While it is possible for NUE TILE to approve a claim for breach of this Warranty without actually physically inspecting the areas affected, NUE TILE reserves the right to inspect any and all areas which the Customer claims adhesive failure in breach of this Warranty. Failure to provide not less than 14 days access to inspect any area which is the subject of a potential Warranty claim shall void this Warranty. Initiating repairs and/or replacements of affected areas by the Customer prior to Notice and Access of the area to NUE TILE shall void the Warranty and the Customer shall not be reimbursed for repairs.

In order to file a claim, written notice shall be submitted to: NUE TILE LLC 1879 Whitehaven Rd #144 Grand Island, NY 14072

Claims must be submitted within thirty (30) days of the discovery of the potential breach of this Warranty. The following information, along with all of the following supporting data, must be included in any claim for breach of this Warranty:

a) environmental conditions at time of testing; b) substrate prep data; c) pictures of the installation; d) specific installation procedures employed; e) NUE TILE lot number of adhesive used and any claimed defect; and f) customer will pay for all claim inspections and will be reimbursed in full, ONLY if the adhesive is found to be defective.

## Remedies

The Sole Remedies available for adhesive failure which may give rise to a potential claim under this Limited Warranty shall be as follows: The Warrantor may request additional information and has the right to inspect the installation prior to remedy actions. Warrantor may request that the Customer provide a minimum of two written estimates from professional installation contractors regarding the costs of repairs. All repairs or replacements must be approved in writing prior to any repairs taking place. Warrantor reserves the right to qualify acceptable contractors and refuse any estimate. Warrantor reserves the right to recover costs, including but not limited to labor and travel, associated with investigating claims shown not to be valid. All areas which are to be repaired/replaced under the terms of this Warranty must be cleared, at the end-user s expense, of all equipment, furnishings, partitions, and the like, that may interfere with the investigation of the claim or the installation or repair of the area.

#### Repair and/or Replacement

1. Upon the submission and approval of a claim under this Warranty, NUE TILE may provide for the reasonable costs or labor and materials to replace or repair the affected areas only. a) NUE TILE (the Warrantor) may reimburse the Customer for reasonable costs of labor and materials to either repair or replace the affected area(s) only. OR b) NUE TILE may also choose to undertake the repair or replacement of the affected areas using labor and materials obtained through its own source(s) of installers and suppliers.

#### Maximum Allowable Claim

If NUE TILE agrees to the aforementioned replacement or repairs, the Maximum Amount which it may be liable for in ANY event shall be calculated as follows: a) NUE TILE will pay for the labor & materials used in the replacement or repair of the affected areas up to an amount which, when calculated on a per square foot basis does, not exceed the price which the customer paid for labor and materials to have the original material installed. b) NUE TILE will not pay more, calculated on a square-foot basis, for the repair or replacement of the affected area than was paid in the original purchase price for material, glue, and installation. THEREFORE, THE CUSTOMER MUST MAINTAIN ORIGINAL DOCUMENTS WHICH PROVIDE THIS INFORMATION IN ORDER TO MAKE A CLAIM. Failure to provide adequate documentation as to the cost per square foot of materials and glue will have to be calculated using the prevailing minimum wage at the time of the original install. Materials will be calculated using NUE TILE's pricing at the time of installation. Material price shall be calculated using the lowest published price at the time of the original installation for similar material to be replaced. c) NUE TILE will not pay for replacement of materials in areas that are not proven to be defective. NUE TILE will pay for replacement of materials only in affected areas, which shall be exclusively determined by NUE TILE. In the event that the sole and exclusive remedy described above fails of its essential purpose, the liability of NUE TILE is limited to the dollar value, on a square-foot basis, of the original purchase price of the portion being replaced.



before you tile...

**DemoFlex** 

# Performance Benefits Using DemoFlex™

- Remove Ceramic 10X Faster!
- Cost-Effective System Crack Resistance
- Install Plywood Underlayment & DemoFlex
   2X Faster than Backer-Boards or Uncoupling
- Mitigates Silica dust exposure
- Sound Deadening Option with a ΔIIC of 22
- Protects radiant heating systems during install & replacement
- Fully Bonded Tile for Heavy Traffic & Commercial Durability
- 'Tile over Tile' and many other trouble surfaces
- 3:1 Savings to Cost Ratio
- Easy Installation (set tile immediately following DemoFlex)
- Remedies tile & grout mistakes or defects much quicker
- Moisture & Alkali resistant for proper exposure

