

Formulated Materials | 3010 NW 149th St, Suite 100 | Oklahoma City, OK OK 73134

[FormulatedMaterials.com](http://FormulatedMaterials.com)

## DESCRIPTION

Combining two new innovative technologies that provide unmatched acoustical performance and durability in a patent pending system. Treadstone® Duo Elite's industry leading deflection/compression innovation allows for Treadstone underlayment depths of 3/4" min. providing an overall thickness of just over 1".

**Treadstone® Elite** – Monolithic, rolled plastic core membrane comprised of polyethylene and polypropylene, in a high compression resistance cusped HDPE design. Provides compression/deflection resistance never seen in an acoustical sound mat product.

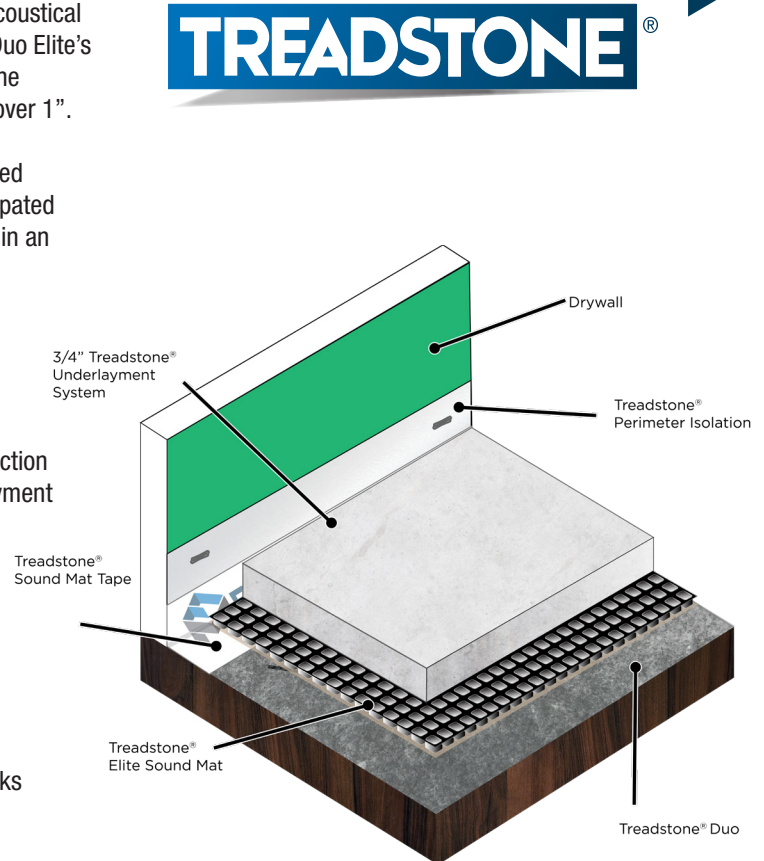
### Benefits:

- Light / flexible for easy installation
- 33,000lbs per sf for 1mm of deflection
- UL Listed in 117 designs
- Can increase IIC values up to 10db in wood framed construction
- Reduced underlayment thickness allows for faster underlayment drying time. Ready for floor covering in 7-10 days
- 95% post-consumer plastic
- Provides a moisture-vapor and odor barrier
- Ideal for concrete construction

**Treadstone® Duo** – Needle punched non-woven polyester fabric technology that provides the systems base layer increasing the low frequency benefit. Due to its flexible properties, Duo can be run up walls and serve as the perimeter isolation strip, thus eliminating leaks (flanking paths) due to tape failure or improper installation practices.

### Benefits:

- Specifically designed to achieve greater low frequency performance.
- Serves as perimeter isolation strip
- Light / Flexible for easy installation
- UL Listed 117 designs
- 100% recycled polyester fibers
- LEED Credits; Materials and Resources - MR 3, MR 4, MR 5, MR 6; Indoor Environmental Quality IEQ 1, IEQ 2; Innovation and Design Process – IDP 1



## ACOUSTICAL PERFORMANCE

Assembly	Treadstone® Underlayment	Treadstone® Sound Attenuating Mat	Finished Floor Covering	STC	IIC	HIIC
18" Truss Joist, 24" O.C., T&G deck, single layer batt insulation, RC-1, 5/8" Ceiling Board	3/4"	None	Vinyl	50	44	
			Tile		41	
			Wood Laminate		49	
		Treadstone® Elite Duo	Vinyl	61	55	56
			Tile		56	57
			Wood Laminate		56	69

## ACOUSTICAL PERFORMANCE CONTINUED

Assembly	Treadstone® Underlayment	Treadstone® Sound Attenuating Mat	Finished Floor Covering	STC	IIC	Delta
8" Concrete Slab, Self Leveling, No Ceiling	1/4"	Treadstone® Elite Duo	Bare Gypsum	52	53	22
			Vinyl	52	54	21
			Tile	54	54	21
			Wood Laminate	53	53	
Prescient Floor Truss and Metal Decking, RC Channel, 12" OC, 1 Layer 5/8 Ceiling Board	1"	Treadstone® Elite Duo	Vinyl	56	55	
			Tile		56	

## TYPICAL PHYSICAL PROPERTIES

### Treadstone® Elite

#### Physical Properties:

- Weight: .086 lbs per sf
- Thickness: .19 in. (3/16")
- Width: 3.75'
- Length: 160'
- SF per roll: 600
- Roll weight: 52 lbs
- Rolls per pallet: 8 rolls

### Treadstone® Duo

#### Physical Properties

- Density: 15.83 lb./ft<sup>3</sup>
- Roll Size: 4' x 150'
- Area covered / roll: 600 sf per roll
- Thickness: .0984 in. (3/32 in.)
- Roll weight 47 lb.
- Rolls per pallet: 6 rolls

## INSTALLATION

### SURFACE PREPARATION

Clean, remove all foreign matter from surface. Surface must be dry.

### APPLICATION

Treadstone® Elite Duo Sound Attenuating System is to be installed by a qualified Treadstone® Dealer. The building must be closed in with a minimum of 50 degrees F, maintained for a period of 5-7 days during and after the installation of Treadstone® Elite and Treadstone® Underlayment. Duo is loose laid on the subfloor with seams tightly abutting.

Perimeter isolation can be provided through the use of Treadstone® PI or by using the Duo mat to provide seamless coverage at all edges.

Install Treadstone® Perimeter Isolation from the top of Duo running up the wall with adhesive face against the drywall, continuing at all perimeters of sound mat surface area. If required, fasten the isolation strip using staples. Ensure staples are placed above the elevation of the intended pour thickness. Once Perimeter Isolation is installed, seal joint between Treadstone® Perimeter Isolation and Treadstone® Sound Attenuating Mat using Treadstone Sound Mat Tape.

To provide seamless perimeter isolation, extend Duo up the perimeter walls by a minimum of 1/4" above the surface of the poured gypsum underlayment to provide seamless perimeter isolation and may be affixed to walls using an approved fastener above underlayment pour depth. All seams on abutting edges of Duo that will be exposed to the underlayment should be sealed using Treadstone® Soundmat Tape tape to avoid flanking paths.

Elite is loose laid on the Duo with all seams running perpendicular to the Duo underlayment whenever possible. Parallel seams should never be placed directly above existing seams in the Duo application. All parallel seams should be staggered by a minimum of 3". All abutting seams of Elite should be tightly joined and sealed using Treadstone® Soundmat Tape.

### STORAGE

Store in dry conditions.

## LIMITATIONS

- Treadstone® Elite Duo is only one component of the floor ceiling assembly and overall noise reduction strategy. While using Treadstone® Elite/Elite Duo will improve the overall acoustics performance of the assembly, the exact amount or minimum performance cannot be guaranteed. Formulated Materials recommends contacting an acoustical consultant for recommendations regarding the acoustical performance of any and all projects.
- To minimize risk of damage to the Treadstone® Underlayment, installation of Elite Duo and underlayment is recommended after drywall. For installation prior to drywall, contact Formulated Materials for recommendations.
- Treadstone® Underlayment thickness/compressive strength recommendations
  - Residential/Multifamily Construction: .75" (38mm) at 2,000 psi minimum
  - Light Commercial: .75" (38mm) at 3,000psi minimum
- Currently currently requires of a min. of ¾" underlayment depth over concrete structures

## UL DESIGNS

G230	G516	G524	G561	G577	G578	G579	G580	G581	G582	G587	G592	H502	J917	J919
J920	J924	J927	J931	J957	J958	J991	J994	L006	L201	L202	L206	L209	L210	L211
L212	L501	L502	L503	L504	L505	L506	L507	L508	L509	L510	L511	L512	L513	L514
L515	L516	L517	L518	L519	L520	L522	L523	L524	L525	L526	L527	L528	L529	L530
L532	L533	L534	L535	L536	L537	L538	L539	L540	L541	L542	L543	L545	L546	L549
L550	L551	L552	L556	L557	L558	L560	L562	L563	L565	L570	L573	L574	L576	L577
L579	L581	L583	L585	L587	L588	L589	L590	L592	L593					
M500	M502	M503	M504	M506	M508	M511	M512	M513	M515	M517	M519	M530	M531	M535
M536														