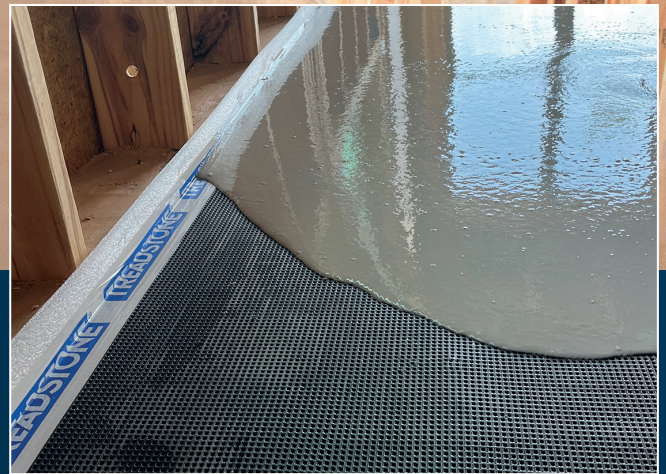




Gypsum **BEFORE** Drywall

*Just because we have always done something a certain way;
does that mean that we should continue to do so?*



Formulated Materials understands that it is important to look for opportunities to improve construction practices. Saving time, creating a more durable installation, or just making a process safer are often the lenses which we look through.



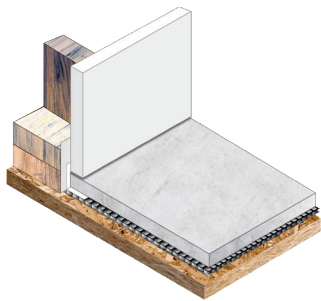
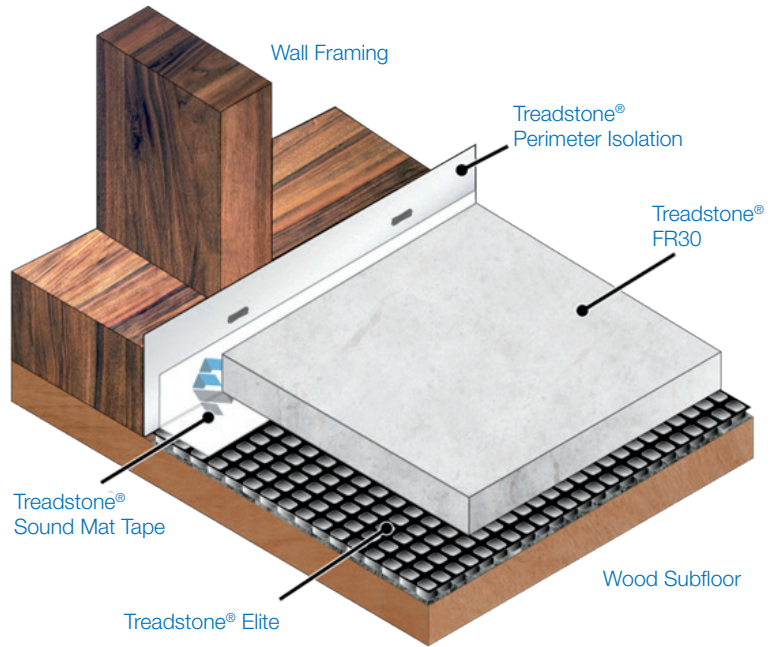
Construction processes often require sequencing of the building process. This sequencing ensures that you do not have conflict or incompatibility issues on the jobsite. Traditionally, drywall installation occurs before gypsum and sound mats in this portion of the sequencing. Since the advent of sound mats, the drywall installation has always gone first due to the compressibility of the sound mat that resides under the gypsum. A fully loaded drywall delivery cart rides on urethane wheels, which can exert thousands of pounds per square inch on the gypsum which causes widespread failure due to the deformation of the sound mat under heavy load.

Gypsum and sound reducing underlayments are a familiar pairing on most multi-family construction sites. Pairing these two products offers a fire resistive, sound attenuating substrate that owners and tenants both require and appreciate. The weak link in this chain has always been the compressibility of the sound mat. Placing a readily compressible sound underlayment beneath a thin layer of poured gypsum cement, frequently leads to cracks and deterioration of the gypsum which telegraphs through the finished flooring.

Sequencing drywall before gypsum ensured the gypsum substrate was not damaged in the delivery and installation of drywall. That is where the positives of this sequence end. For gypsum and sound mat installation crews, this can result in numerous repeated trips back to the jobsite. Several areas of these projects need to have fireproof gypsum poured between wall cavities or under bathtubs. On a large project the gypsum crews might be out to the site to set up, pour and clean up fifteen separate times. Fifteen times means increased costs charged to that job because of the repeated set-ups and tear downs resulting in multiple trip charges.

Formulated Materials has created a solution to this industry challenge. The answer to this challenge is an uncompressible sound reducing mat known as Elite. Elite offers patented sound reduction exceeding industry standards all while offering unparalleled rigidity. Combining the Elite underlayment with a properly batched Treadstone® FR25 or FR30 gypsum underlayment will yield a floor that can withstand greater than 3,500 PSI. This strength is more than enough to withstand heavy rolling loads like drywall carts, toolboxes, hand trucks and refrigerators.

Now for the first time, using the Formulated Materials Treadstone® products FR25 and FR30, sound mat and gypsum underlayment can come before drywall. This is an important advancement because it offers various distinct advantages over the drywall first method:



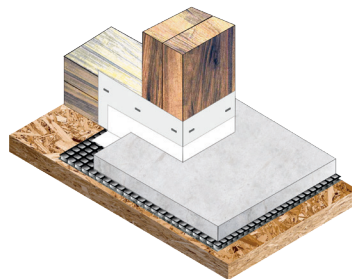
With Treadstone® Elite



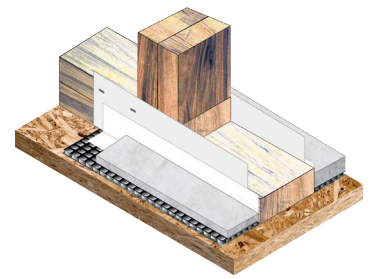
Warpage is evident in the subfloor making drywall installation more difficult.

Saves Time – gypsum underlayments dry out faster with the improved airflow. Pumps can run at full speed without concern of drywall splash. Furthermore, this system also speeds up drywall installation because the level-up process of the lower section of drywall is much easier. Combined all areas of savings have totaled 10 – 14 days pick-up on most job sites.

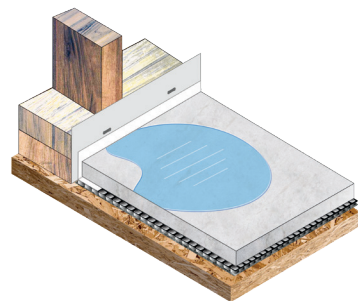
Saves Money – Far fewer trip charges because of pre-pour elimination, better leveling between rooms and substrates means less prep work for the flooring subcontractor to follow and lower costs as a result.



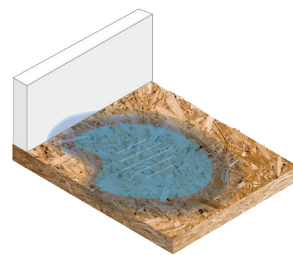
With Treadstone® Elite



Drywall can prevent visual inspection and lead to height differences between rooms.



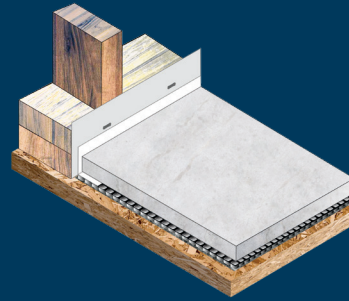
With Treadstone® Elite



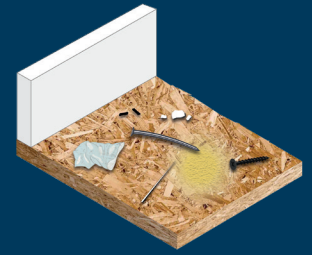
Water can dwell on OSB subfloor and cause mold and other defects.

Protects Subfloor – Getting the Elite sound mat in early helps to protect the subfloor from errant moisture and subsequent mold issues. Elite is impervious to moisture and will not allow moisture or moisture vapor to pass. Mild cases of rain-blown wind or an uncapped roof penetration are no longer a concern as they were in years past.

Protects workers – A smooth color consistent gypsum Treadstone® pour is easier to clean and keep clean resulting in fewer slips and potential foot punctures from debris left on the floor.



With Treadstone® Elite



OSB can be rough and hard to keep clean resulting in more fasteners and worksite waste.

With so many positives in saving of time, money, and additional safety benefits, it is likely that a multitude of future projects will utilize this unique combination of Treadstone® gypsum cements with Elite sound reducing underlayment. Now picking the solution that is best suited for your job comes down to just two decisions.

1. Gypsum Cement – This system requires a minimum of 2,500 PSI Treadstone® underlayment. Treadstone® FR30 is the preferred Gypsum cement to use in this application because it works in all application methods. If manually mixing or using non-Smart Batch hardware, all pours will require Treadstone® FR30 due to increased robustness and 28-day hardness of that formula. Treadstone® FR25 is certified for use with this system when properly batched and pumped with a Smart Batch machine.

2. Sound Underlayment – Treadstone® Elite is an excellent choice for all instances when you want to greatly reduce or eliminate sound transfer between floors. In addition to sound, Elite is impervious to water and vapor and is virtually incompressible. Formulated Materials believes in this pairing of Treadstone® Gypsum Underlayments with Treadstone® Elite Sound reduction mat and is backing this pairing with its standard warranty.

About the Products:

Treadstone® Elite – ¼” thick monolithic HDPE patented design utilizing 90% or greater post-consumer content by weight. Engineered to lay flat with no roll memory, for easier installation. Once Elite installation occurs and is taped at the joints, it acts as a permanent moisture and odor barrier between floors. Sound reducing capabilities meet and can exceed 12db in wood framed structures.

Treadstone® FR30 - Treadstone® FR30’s proprietary formulation brings an innovation to fire-resistive cementitious underlayments. FR30 maintains the desired fire-resistive, non-shrinking, fast cure properties associated with gypsum underlayments, while adding the long desired cementitious properties of high flow, high strength, and abrasion resistance thus providing a new innovative solution elevating the fire-resistive multifamily construction industry. When additional strength will be required, FR30 is the ideal underlayment achieving PSI strengths ranging from 2,500 to 3,800 PSI.

Treadstone® FR25 - Treadstone® FR25’s proprietary formulation sets the standard to fire-resistive cementitious underlayments. FR25 maintains the desired fire-resistive, non-shrinking, fast cure properties associated with gypsum underlayments, while adding the long desired cementitious properties of high flow, high strength, and abrasion resistance thus providing a new innovative solution elevating the fire-resistive multifamily construction industry. As the workhorse of the Treadstone® gypsum line, FR25 reaches PSI strengths ranging from 2000 to 3200 PSI depending on sand and mix ratio.

