Introduction to the

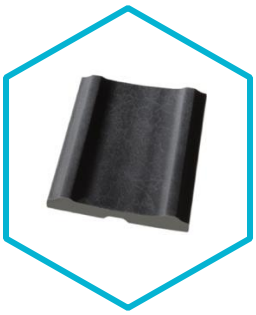
STC ACOUSTIC PAD™

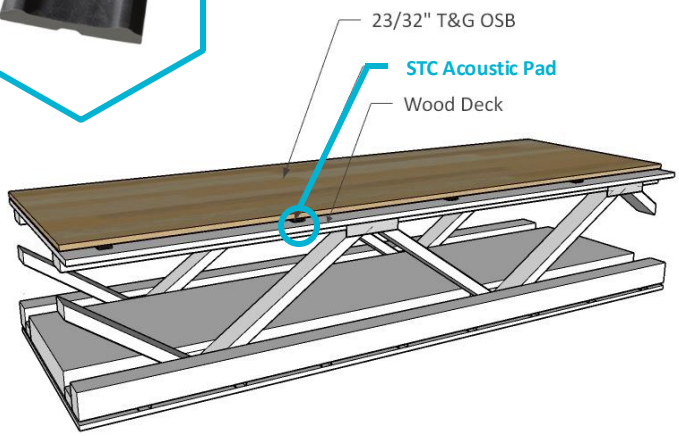
on Wood and Concrete Decks

STC SOUND CONTROL

A BETTER SOLUTION FOR FLOOR UNDERLAYMENT

- **Easier installation**
- **Higher acoustical performance**
- **Lower cost per square foot**
- **Negative carbon emissions**





The **STC ACOUSTIC PAD™** is a patented neoprene rubber pad for flooring systems that reduces impact noise transmitted to floors below. It is an acoustic floor covering system that is installed over fire-rated or non-rated floor construction.

THE PROBLEM OF IMPACT NOISE

A key source of noise is activity from floors above, as sound travels through the floor structure and radiates into the space below. This "impact noise" is measured by a standard called Impact Insulation Classification (IIC).

Different elements of the floor and ceiling construction isolate noise in various amounts - measured by a standard called ΔIIC. However, some form of acoustic insulation (beyond normal deck construction) is generally required to provide additional ΔIIC to bring a building up to code.

In multifamily residential and hotel construction, building codes require an IIC-50 rating.

CHALLENGES OF MARKET STANDARD SOLUTIONS

The most common solution for providing the additional acoustic insulation required by code is a continuous **acoustical mat** covered by a layer of **gypsum cement**.

However, gypsum cement creates multiple issues for construction, including the introduction of moisture, which can cause:

- **Risk** of complications, such as cracking, freezing, and mold;
- **Delays** to construction, caused by the time required to dry.

Meanwhile, solutions such as cork, rubber, or extruded nylon filament mats are significantly more expensive.

Luckily, STC Sound Control provides a better solution ...

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THE STC ACOUSTIC PAD SYSTEM ADVANTAGE

Patented STC Acoustic Pads are adhered with neoprene-based adhesive to the underside of a structural panel and then adhered to the deck. This **removes** gypsum and continuous mats from deck construction, resulting in a solution that is **simpler**, **higher-performance**, more **cost-effective,** and more **sustainable** than the most common underlayment systems:

SIMPLE

Pads are adhered rather than nailed to the deck. NO moisture is introduced to the building, removing risks of cracking, freezing, mold, and delays caused by time to dry.

HIGH-PERFORMANCE

With a ΔIIC-23 rating, the STC Acoustic Pad system outperforms gypsum, rubber, and cork systems for sound isolation.

COST-EFFECTIVE

Material and labor costs for the STC Acoustic Pad system are about 1/2 of the cost of gypsum cement plus acoustical mat systems in wood frame.

SUSTAINABLE

No continuous mats. No cement. Our solution offers net negative carbon emissions for the floor covering system, which – unlike other solutions – can help buildings achieve Net Zero goals.

INSTALLATION & APPLICATIONS

Installation is incredibly simple and can be conducted by framing or flooring contractors. Simply adhere the top (flat) side of the pads to OSB / plywood or any structural panels with recommended neoprene-based adhesive. Then apply adhesive to the underside of the pads and adhere to the deck. Detailed instructions can be found in our Installation Guide.

The STC Acoustic Pad system can be installed over fire-rated or non-rated decks of any design as an acoustic floor covering system.

PERFORMANCE

With Gypsum Board Ceilings				
	Wood Trusses	Wood I-Joists	Wood Joists	Concrete Deck
IIC (Impact Insulation Classification)	54	55	53	64
STC (Sound Transmission Classification)	59	61	55	61

WHAT STC CAN DO FOR YOU

The STC Acoustic Pad system provides a host of benefits for architects, developers, construction managers, and end-users.

We're here to answer your questions and provide any technical guidance required. If you're interested in learning more about the STC Acoustic Pad, just ask for our **Comprehensive Guide to the STC Acoustic Pad** brochure via email – or simply reach out to talk with us directly.

Contact us via web, phone, or email below.