

TECHNICAL BULLETIN #104 – Sound Attenuation Properties of Floraseal 50

When installed in accordance with the CAN/ULC S712.2 Installation Standard, Genyk FLORASEAL light density spray foam will effectively attenuate sound. The Genyk spray foam system reduces both ‘airborne’ and ‘flanking’ noise.

AIRBORNE SOUND REDUCTION

The most common derivatives of airborne noise are human voice and electronic sound waves. The Genyk spray foam system limits the transmission of airborne noise in two ways. First, by providing a layer of absorptive material. The absorptive characteristics of the Genyk system decreases the reverberated sound energy within an occupied space. Second, the superior air sealing characteristics of spray foam eliminates sound ‘flanking’ paths – openings and gaps within a sound transmission path.

Sound reduction properties are most commonly measured by two tests –

1. ASTM 413 measures Sound Transmission. The STC rating is used to compare the potential sound Insulation of partitions and floors. The STC rating provides a range of how well a framed wall attenuates sound.
2. ASTM C423, the Noise Reduction Coefficient (NRC) is a measure of the amount of sound energy absorbed upon striking a surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.

GENYK FLORASEAL – SOUND ATTENUATION PROPERTIES

PHYSICAL PROPERTY	TEST METHOD	VALUE
Sound Transmission Classification	ASTM E413	Wall Assembly - STC-56 Floor Assembly - STC-53
Noise Reduction Coefficient	ASTM C423	NRC - 0.78

GENYK FLORASEAL – PRODUCT COMPARISON

PRODUCT	STC RATING	NRC RATING
GENYK FLORASEAL SPRAY FOAM	Wall – 0.56 Floor – 0.53	0.78
SPRAY-ON CELLULOSE FIBRES	Wall – 0.56 Floor – 0.51	0.75
FIBERGLASS BATT INSULATION	Wall – 0.47 Floor – 0.45	0.70
DRYWALL ONLY	Wall – 0.32 Floor – 0.30	0.35

Note: values are dependent on construction assemblies and can vary with material type.

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