

*This is an abbreviated guide and is not intended as a substitute for the Long Form ISOLATEK SOUND-SHIELD 40 Application & Installation Manual. Applicator shall completely and fully read and understand the Long Form Application & Installation Manual prior to applying this product.*

**PUMP REQUIREMENTS:**

A rotor stator type, open throat, screw feed pump with minimum “No. 4” soft rubber stators must be used.

**MIXER REQUIREMENTS:**

Paddle or ribbon-type mortar mixer with safety cover and provision for quick dumping of mix directly into the pump hopper. Mixers with a 227 litre (8 cu. ft.) capacity or larger capable of operating speeds of 35 to 40 RPM, are required.

**WATER REQUIREMENTS:**

One bag of product requires 11.3 to 15.1 litres (3.0 to 4.0 US Gallons) of potable water per bag. **A calibrated water meter is required** to ensure constant water volume per mix. *Note: The “five gallon bucket” method is unacceptable.*

**MIX TIME:**

Product is mixed by first adding potable water to the mixer and then product. Mix for three (3) minutes to achieve the target mixer slurry density. **In a multiple bag mix, the mix time begins after the last bag has been added to the mixer.**

**HOSE SET-UP:**

High pressure plaster type hose. Typical diameters (ID) and lengths are listed below.

<u>Total Hose Length</u>	<u>Diameter (ID)</u>	<u>Length</u>
15 m (50 ft) or less	32 mm (1.25 in)	@ 8 m (25 ft)
	25 mm (1 in)	@ 8 m (25 ft)
15 to 30 m (51 to 100 ft)	38 mm (1.5 in)	@ 15 m (50 ft)
	32 mm (1.25 in)	@ 8 m (25 ft)
	25 mm (1 in)	@ 8 m (25 ft)

Hose couplings shall be screw-on type connect/disconnect that do not restrict product flow. Steel tapered reducers must be used when a reduction in hose is necessary. Brass or aluminum couplings or reducers must not be used.

**NOZZLE REQUIREMENTS:**

The spray nozzle assembly must consist of a min. 25 mm (1 in.) I.D. aluminum pole with a blow-off type nozzle cap. Nozzle orifice shall be nominal 13 mm (1/2 in.) diameter.

**NOZZLE DISTANCE:**

The distance between the nozzle and substrate will vary according to the type of equipment and nozzle used but must be between 305 mm (18 in.) and 610 mm (24 in.).

**NOZZLE AIR PRESSURE:**

Use the amount of air at the nozzle that results in an even thickness build, texture and proper density. Compressed air is required and must be delivered to the nozzle at a minimum volume of 566L/min (20 cfm) and a minimum pressure of 2.75 bar (40 psi).

**THICKNESS:**

Initial coat is applied 6.4 mm (1/4 in.) thick. Subsequent coats are applied 6.4 mm (1/4 in.) thick. Finish coat is to be applied to a thickness up to 12.7 mm (1/2 in.). For target application less than 9.5 mm (3/8 in.), the initial coat shall be approx. 4.8 mm (3/16 in.).

**APPLICATION TEMPERATURE:**

Product must be applied when the temperature is between 4°C (40°F) and 35°C (95°F) and relative humidity is above 50%. A minimum substrate and ambient temperature of 4°C (40°F) shall be maintained prior to, during and a minimum of 24 hours after the application.

**SURFACE PREPARATION:**

Refer to **ISOLATEK SOUND-SHIELD 40 Long Form Application & Installation Manual** for requirements.

**MULTIPLE COATS:**

12 to 24 hour set time is required in between coats. If surface becomes dry, it must be moistened with water prior to applying further coats.

**VENTILATION:**

Provide a minimum of 4 complete air exchanges per hour until the material is dry.

**CALCULATING MIXER DENSITIES:**

1. Weigh an empty 1036cc ISOLATEK cup and tare the scale to account for the cup weight.
2. Fill the cup with material from the pump hopper. Then gently tap the cup on a hard surface to eliminate all air pockets.
3. Level the material with top of cup.
4. Weigh the filled cup in grams.
5. Compare weight in grams to the mixer density in chart below.

**SAFETY PRECAUTIONS:**

**ISOLATEK SOUND-SHIELD 40 is slippery when mixed with water. Do not allow wet material to remain on scaffolds, ladder rungs or floors. Walking on wet material may result in slips or falls.** Signage must be posted in areas where the spray application of SOUND-SHIELD 40 is ongoing to warn other trades of slip hazards.

**ESTIMATING SOUND-SHIELD 40 MIXER DENSITY FROM WET CUP WEIGHTS**

WET CUP WEIGHT (Grams)	MIXER DENSITY Using 13.2 L (3.5 US Gals) Water	
	PCF	(kg/m <sup>3</sup> )
648	39	(625)
681	41	(657)
714	43	(689)
748	45	(721)
781	47	(753)
815	49	(785)
848	51	(817)
881	53	(849)

Cup Size = 1036cc

**CALCULATING NOZZLE DENSITIES:**

(Estimating Yield/Bag from Nozzle Wet Cup Weights)

1. Weigh an empty 1036cc ISOLATEK cup and tare the scale to account for the cup weight.
2. Spray the material directly into the cup. Then gently tap the cup on a hard surface to eliminate all air pockets.
3. Level the material with the top of the cup.
4. Weigh the filled cup in grams.
5. Compare weight in grams to the nozzle density in chart below.
6. To increase nozzle cup weight, increase atomizing air at the nozzle until target density is achieved.

NOZZLE CUP WEIGHT (Grams)	THEORETICAL DRY DENSITY Using 13.2 L (3.5 US Gals) Water	
	PCF	(kg/m <sup>3</sup> )
962	35	(561)
1018	37	(593)
1072	39	(625)
1126	41	(657)
1182	43	(689)
1236	45	(721)

Note: If you are having difficulty achieving these nozzle cup weights, please contact the Isolatek International Technical Service Department for assistance.

\* Nozzle weights are based on a cup with a volume of 1036cc.

**NOTE:** Only the listed equipment, nozzles and procedures are approved for applying ISOLATEK SOUND-SHIELD 40. Deviations from these requirements will result in product not meeting claims as published in the literature. **For additional information, please contact the Technical Service Department.**



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