

ESD TILES TECHNICAL DATA SHEET

This Product has permanent anti-static function because it uses conductive static network at the interface of plastic particles.

ITEM	STANDARD	INDEX
Size	SJ/T11236-2001	600*600mm
		610*610mm
Thickness	SJ/T11236-2001	2.0 , 2.5 , 3.0mm
Electrical Resistance	SJ/T11236-2001	EC 2.5*10-1.0*10
Stating Voltage	SJ/T11236-2001	IVI<100V
Static Decay	GJB2605-1996	<= 2 (Sec)
Resistance to Wear	SJ/T11236-2001	<=0.020g/Cm2
Fire Resistance	SJ/T11236-2001	FV-0
Dimensional	Stability En434	>=0.10%
Rate of Damnify Heating	SJ/T11236-2001	<=0.50%
Rate of Changing Heating	SJ/T11236-2001	>=0.20%
Rate of Changing Watering	GB4085-83	<0.15%
Residual Concavity	SJ/T11236-2001	<=0.15
Concavity	SJ/T11236-2001	<=0.30
		<=0.60
Color Fastness	ISO 105202	<=6

CARE AND MAINTENANCE

Clean floor by machine-scrubbing with neutral detergent .Lightly soiled floors may be damp mopped but also should be periodically machine-scrubbed. Severe soiling or black marking can be removed with floor cleaning machine, synthetic stripping pad and a commercial stripping solution. Clear water rinsing is necessary after any scrubbing or stripping operation to removed all cleaner floor maintenance should apply spray and grinding. If necessary can maintenance the surface of Brick by conductive wax periodically.



INSTALLATION

ARO-AADI INTERNATIONAL Conductive tile and Static-Dissipative tile should be installed on sub floors that are levered smooth and free of cracks. Residual humidity should be under 2.5% tested with the CM Dumb test. Tiles adhesive and installation site should reach a temperature of at least 18 C at 24 hour before installation and paste the tiles with qualified conductive glue below 10⁵ Ohm for further details on installation method.

General Preparation and Conditioning

Read the literature concerning the product description, product limitations, product installation, adhesive information, product maintenance and warranty before installing the tile. All materials including recommended adhesive are to be delivered to the installation location in its original packaging with labels intact. DO NOT stack pallets of material as this will cause damage. Store products in a dry area protected from the weather on a smooth, flat, dry surface with temperatures maintained between 65° F (19° C) and 85° F (30° C). Remove all plastic wrapping and strapping from the pallets upon arrival to the installation area and at least 48 hours prior to installation. For proper acclimation, remove the tile from the cartons and stack evenly on a smooth dry surface with each stack no more than 18" high. When stacking tiles prior to and during installation, place the tiles face-to-face and sanded back-to-sanded back to prevent the sanded back of the tiles from being contaminated and to protect the product from damage. The installation area, tile, adhesive and welding rods are to be maintained between 65° F (19° C) and 85° F (30° C) for a minimum of 48 hours prior to installation. These temperature ranges must be maintained throughout the installation phase and thereafter. If temperatures other than ARO-AADI INTERNATIONAL's requirements become an issue, contact the ARO-AADI INTERNATIONAL Technical Service Department prior to installation. Notice: Tile should be loose laid in the room or area prior to spreading of adhesive to determine the proper layout to ensure the best overall appearance and to minimize small border cuts. Inspect all material for proper type and color. Conduct the proper moisture emission and pH testing on the substrate. Proceed with the installation only when the conditions are proper and correct. A bond test using ARO-AADI INTERNATIONAL Solvent Free ESD Epoxy Adhesive throughout the area approximately 50 feet apart should be performed at least one week prior to the scheduled installation to ensure the surface is suitable.



Subfloor/Substrate Inspection and Preparation

General

All subfloors/substrates must be inspected prior to installation. All substrates must be clean, smooth, permanently dry, flat, and structurally sound. The substrate must be free of moisture, dust, sealers, paint, curing compounds, parting agents, residual adhesives, adhesive removers, hardeners, resinous compounds, solvents, wax, oil, grease, asphalt, gypsum compounds, alkaline salts, excessive carbonation or laitance, mold, mildew, any other extraneous coatings, films, materials and all other foreign matter which might interfere/restrict proper adhesive bonding. DO NOT use sweeping compounds, solvents, citrus adhesive removers, or acid etching to clean the substrate. DO NOT install Flooring over gypsum-based or plaster based leveling or patching compounds. DO NOT install new floor covering over old floor covering, as the old floor covering may not be adequately bonded, hide possible structural defects or cause plasticizer migration into the new flooring. In renovation or remodel work, remove all existing adhesive residue so that 100% of the overall area of the original subfloor/substrate is exposed (Caution: Some previous manufactured asphaltic “cutback” contained asbestos).

Follow The Resilient Floor Covering Institute’s (RFCI) “Recommended Work Practice for Removal of Existing Floor Covering and Adhesive”, and all applicable industry, local, state, and federal standards. Care must be taken to analyze the conditions and correct any problems prior to installation. Follow the manufacturer’s recommendations for any patching or underlayment materials, excluding gypsum based or plaster based levelers or patching compounds.

Adhesive Information

ARO-AADI INTERNATIONAL Solvent Free ESD Epoxy Adhesive

ARO-AADI INTERNATIONAL solvent Free ESD Epoxy Adhesive must be used for the installation of ARO-AADI INTERNATIONAL Conductive and Static Dissipative Solid Vinyl Tile. It is a solvent free, non-flammable, high performance epoxy adhesive for indoor installations over porous and non-porous substrates on grade, below grade or above grade. It is available in both quart and gallon units. When used on non-porous substrates, the adhesive must be allowed to “tack up” before placing tiles. The approximate spread rate using the 1/32” deep x 1/16” open x 1/32” “U” notch trowel provided, is 175 square feet on smooth, steel troweled concrete or a non-porous substrate. Over porous or rough substrates, a 1/16” x 1/16” x 1/16” flat “V” notch trowel may be required; spread rate for this trowel is approximately 150 square feet. Coverage will vary according to the type of surface, surface texture, spreading angle and/or adhesive



temperature. Although the epoxy components are non-freezing, the adhesive must be allowed to stabilize to ambient temperature before mixing. Shelf life is one year @ 70° F (21° C) from adhesive manufacturing date in an unopened container. Wet adhesive on the surface of the tiles or surrounding area must be removed immediately with a clean cloth dampened with warm soapy water or denatured alcohol. DO NOT allow adhesive to cure on the surface of the tile. Caution: A bond failure will occur if the epoxy is not properly mixed. Label information is in English and Spanish. Read all of the product and safety information concerning the adhesive and any other chemicals or cleaning agents prior to installation.

ARO-AADI INTERNATIONAL 66/67 Solvent Free ESD Epoxy Adhesive is Green Label Plus certified by the Carpet & Rug Institute. Part A VOC's 9 g/L, Part B VOC's 20 g/L; 14.3 g/L when mixed

Adhesive Application and Product Installation

ARO-AADI INTERNATIONAL Conductive and Static Dissipative Vinyl Tile installation should only be performed with the ARO-AADI INTERNATIONAL 66/67 Solvent Free ESD Epoxy Adhesive. Read all installation literature before proceeding. Prior to adhesive application, dry lay the flooring to ensure desired aesthetics (refer to 6.1). Follow safety precautions on the adhesive label and Material Safety Data Sheet. Ensure the installation area has adequate ventilation. DO NOT mix partial units of this adhesive, because the ratio of Part A to Part B is not 1:1. ARO-AADI INTERNATIONAL 66/67 Solvent Free ESD Epoxy Adhesive is packaged in two separate containers marked Part A (epoxy resin) and Part B (polyamide resin, hardener). Remove the lids and add all of Part A into Part B. Mix the combined parts using a rotary motion while at the same time lifting from the bottom. A slow speed, 200 RPM maximum drill, with an attached mixing paddle may also be used. Mix for a minimum of 3 minutes with drill or 5 minutes by hand. After mixing, there must be no streaking of the two parts in the adhesive; it will be consistent black color.

Grounding & Grounding Diagram

To ground the conductive flooring to a known ground, use the 1" wide x 0.004" thick x 18" long copper foil strips which are supplied by ARO-AADI INTERNATIONAL. Place approximately 9" of the strip into ARO-AADI INTERNATIONAL Solvent Free ESD Epoxy Adhesive while the adhesive is still wet to ensure a 100% transfer to the copper foil backing, under the tile nearest the ground point. ARO-AADI INTERNATIONAL ESD Adhesive must also be applied to the top section of the copper foil strips in order to complete the conductivity and to bond the tile to directly to the copper foil strips. Allow the other half, approximately 9", of the length of the strip to "pigtail" up the wall to permit an electrician to mechanically connect the copper foil to the ground point.



If using a specifically supplied ESD facility grounding system, a ground bus bar would be placed near the floor where any ESD ground can be connected. If bus bars are not used, the ESD

ground wire is normally #10 or #12 stranded copper wire supplied by the electrical contractor, is placed inside the wall from a ground bus and a hole is cut into the drywall for the wire to exit at the floor/wall junction where the copper foil has been placed. Grounding to the green wire ground in the wiring system may also be used; Refer to the Grounding Diagram that follows. Use longer copper foil strips if necessary. Place the copper strips approximately every 2000 square feet along the perimeter of the floor or where the ground points are located and/or at least one per room. The ground connection may also be made directly to an exposed steel support column. The connection must be mechanically secured to the Column. Resistance testing should be conducted in accordance to the test method, voltage, and conditions specified.

QUALITY CONTROL

- 1- Random test for the conductivity, color difference and dimension before delivery.
- 2- Test each batch of conductive adhesive for electrical resistance before delivery.
- 3- ARO-AADI INTERNATIONAL representatives are available to provide technical assistance in evaluation of onsite installation condition or to review actual installation techniques.