CONTACT ADHESIVE

This Installation Guide provides recommendations to maximise the service life in various applications. Contact adhesive is a synthetic rubber solvent solution that must be applied to both surfaces to be bonded.

WORKING HEALTH AND SAFETY

- Gloves , protective goggles and any other appropriate safety equipment based on local health & safety requirements and safe work practice must be worn by applicator.
- Avoid contact with skin, eyes and avoid breathing in vapour.
- Ensure good ventilation and no ignition sources during application as the bonding process emits solvent vapours.
- A fresh bond may emit vapour. Let this dissipate . Turn off heater if in use.

DESCRIPTION

Contact adhesive is a synthetic rubber solvent solution that must be applied to both surfaces to be bonded.

Pyrotek also offer products that are pre-sprayed with 'Acoustick' contact adhesive, in which case, you will be required to apply contact adhesive only to the surface of the substrate being bonded to. The adhesive applied on the substrate will reactivate the dry film of pre-sprayed adhesive on the back of the product and form a bond on contact, with high initial strength and shear resistance.

As the nature of acoustic foam is open cell, a pre-sprayed backed product eliminates the possibility of wastage of adhesive, as there is common tendency to over apply adhesive on the acoustic product, resulting in an uneven bond.

Contact adhesives have good adhesion to metal, timber, rigid or flexible acoustic insulation foam, MDF and some plastic surfaces and are therefore used in many industrial applications.

Choose a contact adhesive closely matching the properties in the table.

(Please refer to Information page 'Acoustick - 513IP ' or contact our Pyrotek representative for our suggested Contact Adhesive.)

***Note:** Under extreme temperature conditions or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required on vertical surfaces. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to PSA adhesion*

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applications

- Smooth surfaces / Metal substrates e.g. Stainless steel/Plain Steel/Aluminium
- Painted surfaces
- Porous surfaces - e.g. Masonry surfaces, Timber, Plywood
- Plastics - (PE/PP/FRP/GRP)
- Powder coated surfaces - Typical types include Epoxy, Urethane, Polyester, Hybrid or blends , Textured

TYPICAL CONTACT ADHESIVE PROPERTIES	
Adhesive type	Polychloroprene rubber resin
Solids content	Solids (by wt.) 18-21%
Viscosity	Sprayable (approx. 310cps)
Water resistance	Good but not for continuous immersion
Oil and petrol resistance	Good - but will not withstand immersion
Open time	Approx. 20 mins @20°C
Tack Up Time	3 - 5 mins @20°C
Working time	5 - 20 minutes
Drying time	10 - 20 minutes
Curing time	Up to 50 minutes
Operating Temperature Range	- 40°C to +100°C
Flash Point	- 22°C Highly flammable

The figures above are quoted for guidance only. Please verify suitability for your requirements and application environment. Factors like temperature, humidity, nature of substrates affect drying and curing times.

SUBSTRATES AND SURFACE PREPARATION

Smooth surfaces /Metal substrates: e.g. Stainless steel/Plain Steel/ Aluminium

- To be lightly sanded with medium (120 grit) sandpaper. Residue from sanding must be cleaned with lint-free or tack cloth and denatured alcohol and let dry.
- Priming is recommended though not necessary.

Painted surfaces

- To be cleaned with a dry-cleaning agent and allowed to air until dry. Test for compatibility with cleaning agent.

Porous surfaces: e.g. Masonry surfaces, Timber, Plywood

- Seal surfaces with adhesive, let dry and then commence bonding.
- Mechanical fixing in addition to glue/contact adhesive will be needed.
- C-Channel mechanical fixing highly recommended.

Plastics: (PE/PP/FRP/GRP)

- Certain components/release agents migrate to the surface that may not sup-port self-adhesive bonding. Trial bond is recommended to ensure compatibility.

Powder coated surfaces : Typical types include Epoxy, Urethane, Polyester, Hybrid or blends , Textured

- Powder coating formulations vary with every manufacturer as there is a wide range of variability in the ingredients used by them. Some of these powder coatings require different adhesive properties to form an adequate bond to the powder coated surface.
- Bonding method should be established based on in-house testing by OEM to determine suitability on intended application.

APPLICATION GUIDELINES

- For large areas (over 3 m^2), use a gravity-fed spray gun and a 'Pressure pot'. Use a 1.5 - 2 mm tip in both.
- Air pressures and gun settings will depend on the adhesive used. Typically, high atomising pressure is required to give a good even spray pattern, between 60-100 PSI or 4-7 bar.
- Air pressure to the pressure pot needs to be approximately 30 psi or 2 bar. This will depend on the hose length and viscosity of the adhesive.
- Contact adhesive can also be applied using a paint brush. Brushes/roller designed for oil-based paint may be used. However, applying contact adhesive other than by spray for larger applications, is time consuming with a tendency to over apply and waste adhesive

COVERAGE

- 80% coverage on both surfaces.
- Up to 4 bonded m^2/litre.
- Up to 8 m^2/litre on one surface, if product has pre-sprayed adhesive backing.

STORAGE

- Store in a clean, well ventilated, dry environment with a stable temperature of between 10°C-20°C.
- Store under cover and away from direct sunlight, heat and naked flames.

SHELF LIFE

- 12 months from date of manufacture if storage instructions followed.

CLEAN UP

- Clean spills and tools with a clean-down solvent like white spirit.

Gravity fed spray gun

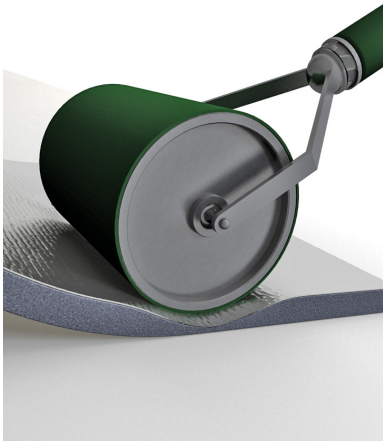
Pressure pot

INSTRUCTIONS

1. Follow 'Health and Safety' precautions: Gloves, protective goggles and any other appropriate safety equipment based on local health & safety requirements and safe work practice must be worn by applicator. Avoid contact with skin, eyes and avoid breathing in vapour. Ensure good ventilation and no ignition sources during application as the bonding process emits solvent vapours.
2. Follow 'Surface preparation'
3. Mix the adhesive thoroughly before use.
4. Spray a light , even coat of adhesive to both surfaces so it looks like a fine web. (see recommended 'Coverage') Edges to be post-formed must have 100 % coverage.
5. Allow the adhesive to dry for 3-5 minutes after application and before bonding or till the surface can be touched without any adhesive transfer. Highly porous or absorbent surfaces may require two coats. Allow the first coat to tack off before applying the second coat. The thicker the layer of adhesive, the longer it will take to dry.
   (Care: It is common mistake to bond the materials with contact adhesive ahead of time.)
6. Align and position the surfaces being bonded carefully taking care to avoid air pockets . Spacers such as dowels or laminate strips may be used to prevent premature contact and bonding as no adjustment is possible after contact. The initial bond is immediate. If used, slide out the spacers and apply uniform pressure.
7. A roller may be used to apply adequate and uniform pressure (esp. on edges) For products 3 to 50 mm thick (e.g. Sorberfoam or Sorberbarrier®) use a 150 mm thick x 200 mm wide rubber roller.
8. Avoid air pockets, press firmly with uniform pressure in one direction only. Move the block/tool/roller in the same direction each time making sure the entire surface is covered. Firm pressure develops better adhesive contact and improves bond strength.
9. Some residual solvent vapour may be present in freshly adhered product. This should be left to dissipate to prevent any possible risk of ignition.

Note: *Use our instructions as a general guideline. The responsibility to assess and compensate for application environment lies with the installer.*

A correctly sprayed coat looks like a fine web



Thicker products are best rolled