



The Glue People

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Tradeweld DeLam TX

Delamination Repair System

General Description

DeLam TX is a two part, low exotherm, thixotropic epoxy resin system; primarily designed for pressure injection into delaminated flooring in the repair of caravans and motorhomes. The unique nature of DeLam TX allows it to be pressure injected by gun from underneath the caravan, thereby saving time, labour and money by eliminating the need to remove fitted furniture and cut flooring in order to get to the delaminated area.

The two part system can fill gaps from 0.1mm to 10mm and is non shrink enabling a complete fill of gaps and voids. DeLam TX is suitable for most construction materials with particular reference to thermal insulation materials based on timber – polystyrene composites. The hardened adhesive is resistant to most chemicals and is stable to repeated temperature cycles.

Application

For best results, it is imperative that the delamination is treated as quickly as possible after it is first noticed, as constant trafficking of a delaminated floor will create dust and debris between the timber ply and the insulation material.

The first part of the repair is to determine the extent of the damage. From inside the vehicle walk on the floor to determine how far the delamination has travelled. Mark the outer edges of the damage and then by careful measurement, transfer this information to the underside.

Drill a series of 8mm holes up into the floor, but not through the insulation, to cover the entire affected area at 200mm centres and in a diamond pattern. Now drill 6mm pilot holes up through the insulation until you touch the upper floor section. This will form a tight seal around the probe to prevent the adhesive from squeezing past it and out of the bottom of the hole. (fig. b). Vacuum around the drilled holes and remove as much dust as possible from inside the holes.

When all of the preparation work is complete, empty the entire B pack into the A pack and mix thoroughly by hand until a homogenous mix is achieved. The material will seem to thicken considerably during mixing, this is just the thixotrope reacting, and is normal. Although the material seems thick, it will pump very easily. Load into the DeLam injection gun with a spatula and close the gun. DeLam TX has a specially controlled exotherm to keep heat build up to a minimum and to increase pot life. The mixed material will remain useable for at least 1 hour.

The plastic probe on the end of the flexible injection pipe is now pushed into one of the 6mm pre-drilled holes in the insulation material. When it hits the upper plywood floor, pull it back around 6mm (1/4") and then start to pump the resin into the space, still holding the probe in place. Seven to eight complete pulls on the trigger will usually suffice. If it builds up a lot of pressure and refuses to pump, remove the probe and go to the next hole. It probably means that the ply has not delaminated in that position. Work methodically across the van completing one line of holes at a time to ensure that no air is trapped in the adhesive. Alternatively, work around the delaminated area and work slowly towards the centre. Be aware that the resin will start to cure fairly quickly inside the gun and therefore needs to be applied without delay. When the injection is complete, immediately place some boards inside the van, above the injected area and place some weights on them to bring the ply into contact with the insulation. This will probably displace some resin and will pump it back out through the holes, so ensure there is a dust sheet, paper, etc under the van to catch it. The adhesive will be cured well enough the following morning to move the van. Do not forget to clean any resin from the gun quickly. If the resin starts to set inside the gun, it will be rendered useless.

Finally plug the holes with the grommets supplied. Do not clean around the hole first as residual resin will help to bond the grommets into place.

Physical Data

	Part A	Part B
Base	Epoxy	Polyamine
Appearance	Light paste	Liquid
Density	1.2g/cm ³ @ 20°C	c/a 1g per cc @ 25°C
Vapour pressure	< 2 Pa @ 20°C	< 1 Pa @ 20°C
Viscosity	Thixotropic paste	> 10 mPa.s @ 25°C
Shelf life	12 months in unopened packs when kept in dry conditions at temperatures between 5°C and 35°C. Higher temperatures may reduce shelf life.	

Pot life for adhesive after mixing.

Ambient temperature (°C)	5	10	20	30
Useable time (minutes)	80	45	25	10

Additional Properties

Slant shear strength	55 N/mm ²
Density	1200 Kg/m ²
Mixed adhesive viscosity	Thixotropic

Exotherm temperature development @ 20°C

Time after mixing (hours)	1	2	3
Exotherm temperature (°C)	30	55	55

General Information

When repairing large delaminations or multiple repair jobs; it is important to clean the barrel of the injector gun at least once every hour. This is because the residue of mixed adhesive near the end of its pot life can react with freshly mixed adhesive causing drastically reduced pot life and even flash setting of the adhesive inside the injector gun.

Health and Safety

DeLam TX is an epoxy resin based adhesive. Epoxy resins may cause an allergic reaction in some people. Wear gloves, use barrier cream on unprotected skin areas and wear suitable eye / face protection when mixing, using and cleaning. Ensure adequate ventilation to prevent inhalation of vapours. If skin contact occurs remove resin immediately with cleansing cream and wash with soap and water. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice. If swallowed, do not induce vomiting, seek medical attention immediately.

Important Notice

Data contained in this document is for information only and is believed to be reliable. Trade Grade Products Ltd (TGP) cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability of the product for any specific purpose and TGP is pleased to provide a sample upon request.

Before using this product ensure that you have been supplied with and have read carefully the following information.

- The hazard label (complying with latest CDG/CPL regulations) applied to the container.
- Material Safety Data Sheets, DeLam TX Part A and DeLam TX Part B.

Instruction sheets are available for general use and heavy-duty use for badly damaged floors.