

INSTALLATION & MAINTENANCE GUIDE

LINASHIELD



LinaShield

Wear linings | Screens | Belts | Conveyors | Dump truck linings | Wagons | Silos
| Chutes | Feeding channels | Magnetic separators | Cones | Hoppers |
Crushers | Sorters | Skips | Bins | Slurry Channels



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 FOREWORD 


LinaShield thermoplastic polyurethane sheeting has been developed for high abrasion applications including wear linings, screens, belts and conveyors. It qualifies as a high-grade thermoplastic elastomer (TPE), whilst exhibiting similar properties to that of rubber and traditional thermoplastics.

LinaShield increases productivity by reducing downtime, as it outlasts conventional materials used in these applications. **LinaShield** is designed to extend wear life and reduce the maintenance requirements of your process equipment.

This document includes important information including hazards and precautions to be taken when working with **LinaShield**. Please read all the information included in this guide before cutting, installing or removing a liner.


 WARNING 


 **Always** obey all applicable safety rules 


 **Beware:** Burning **LinaShield** gives off toxic fumes. Ensure the area is well ventilated and use of a respirator is strongly recommended

 **Power:** Ensure all power to the conveyor has been disconnected and controls are locked out

 **LinaShield** presents no health hazards in its produced state and is safe to transport.

 If overheated or burned, **LinaShield** emits toxic fumes. Operations such as welding, grinding and cutting, may produce dusts, polymer decomposition by-products and metal fumes.

 Dusts and fumes may be irritating to eyes and respiratory tract. Dusts may be flammable. Provide adequate ventilation and follow all installation instructions.

 Store away from flame or other sources of ignition. **LinaShield** must be protected from heat and sparks generated by welding or cutting torches. Hazardous decomposition by-products include, carbon monoxide, carbon dioxide, hydrogen cyanide and polymer fragments.

Drying times

Atmospheric conditions have a big effect on drying times. Therefore, the drying times below are indicational. Drying and curing times can be reduced with the addition of heat

Cutting Techniques

LinaShield can be cut with a heated knife, a water jet cutter or a laser cutter

LinaShield to LinaShield

- ✓ Roughen both surfaces of **LinaShield** using a slow speed buffing tool with a sanding disk (P24 Grit works well)
- ✓ Clean the surfaces with a solvent and tissue paper
- ✓ Mix TPU glue with hardener thoroughly (mix for roughly 5 minutes) (as detailed on the glue container)
- ✓ Apply a coat of glue to each surface intended to glue and dry for at least 30 minutes. The surface should be completely dry.
- ✓ Apply another layer of glue to each surface and leave for approximately 15 minutes to dry. The glue must be “sticky”
- ✓ Stick the surfaces together and hammer out all the air, from the center outwards of the worksheet, with a rubber mallet or stitching tool
- ✓ Apply pressure to the workpiece for roughly 2 hours
- ✓ Cure workpiece for 8 more hours before production

LinaShield to Steel

- ✓ Clean and roughen steel surface of any coating or rust using slow speed buffing disk, grinding disk or flap disk
- ✓ Roughen **LinaShield** surface using a buffing tool with a sanding disk (P24 Grit works well)
- ✓ Clean steel surface and **LinaShield** with solvent
- ✓ Apply primer to steel and leave for 3 or more hours to dry (as detailed on the glue container)
- ✓ Apply a layer of PL glue to the **LinaShield** and leave for a minimum 30 minutes to dry completely
- ✓ Apply a layer of glue to the **LinaShield** and to the steel and leave for roughly 15 minutes to dry until sticky
- ✓ Stick the surfaces together and hammer all the air out, from the center outwards, with a rubber mallet or stitching tool
- ✓ Apply pressure and leave for 2 hours to cure
- ✓ Cure workpiece for 24 more hours (PL)

LinaShield to Concrete

- ✓ Roughen **LinaShield** surface using a slow speed buffing tool with a sanding disk (P24 Grit works well)
- ✓ Clean concrete of any dust with a brush and solvent (Topsol NT)
- ✓ Clean **LinaShield** with solvent
- ✓ Apply glue to concrete and **LinaShield** and leave for 30 minutes to dry completely (as detailed on the glue container)
- ✓ Apply glue to concrete and **LinaShield** and leave for 15 minutes to dry until sticky
- ✓ Bring surfaces together and hammer all the air out from the center outwards, with a rubber mallet or stitching tool
- ✓ Apply pressure and leave for 2 hours to cure
- ✓ Cure workpiece for 24 more hours

Images

➤ **LinaShield** Being roughened



➤ Steel Being Roughen



➤ Solvent



➤ PL Glue



➤ TPU Glue



➤ Hot Knife



- Buffing Tool – Velcro Backing Pad 150mm M14 with 8mm Spindle

