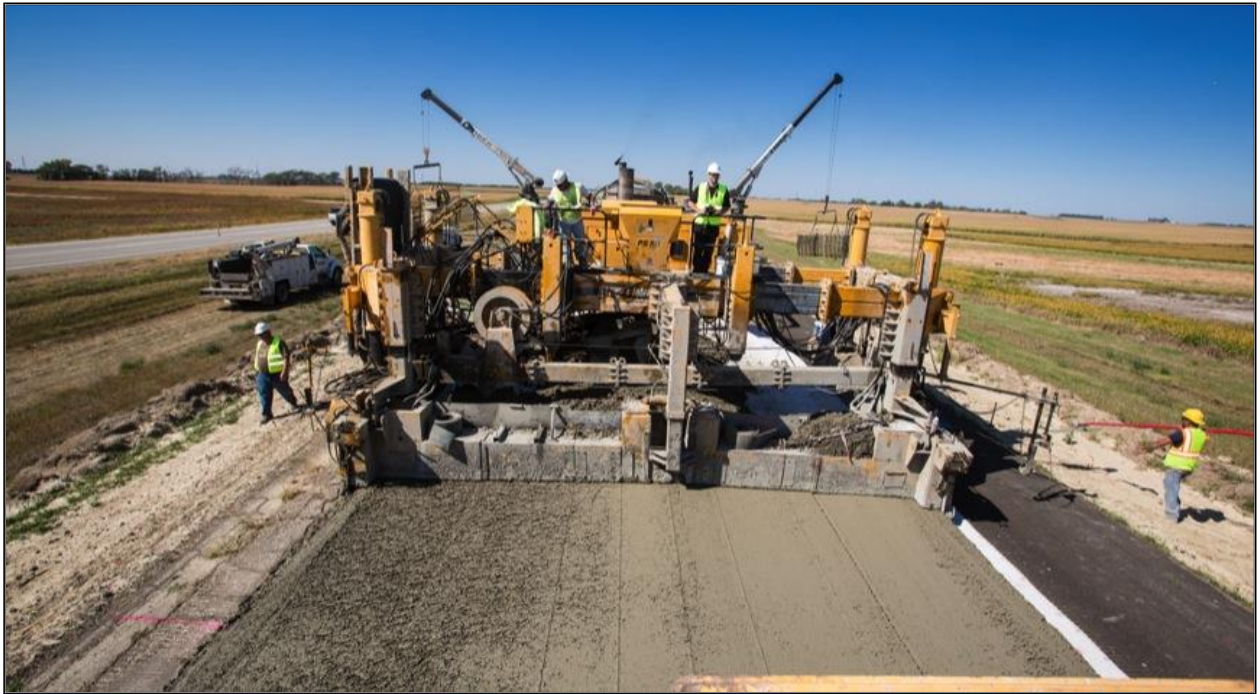




# REFLECTEX<sup>®</sup>

## INSTALLATION GUIDELINES REFLECTEX<sup>®</sup> GEOTEXTILE Concrete Interlayer Geotextile



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## WHAT IS REFLECTEX®?

REFLECTEX® is part of a family of needlepunched nonwoven GEOTEXTILE products produced by Propex Operating Company, LLC (Propex) for separating cementitious pavement sections in unbounded concrete overlays. REFLECTEX and its sister product GEOTEX® 1341NH are resistant to ultraviolet degradation and to biological and chemical environments normally found in soils. Their fibers are needed to form a stable network that retains dimensional stability relative to each other.



As concrete interlayers, REFLECTEX and GEOTEX 1341NH provide cushion and drainage between an existing pavement layer and a concrete overlay. They also prevent bonding between the new overlay and the existing pavement below.

REFLECTEX specifically is designed with a reflective additive. This helps in keeping the fabric cool during construction. The typical black coloration of GEOTEXTILES absorbs heat from the sun during installation causing the fabric to become hot to the touch. The unique design of REFLECTEX keeps it cool during hot installation days.

The success of these concrete interlayers is dependent on proper installation. This guide is intended to lay out the proper techniques to install REFLECTEX correctly and safely. Because no guide can cover every installation challenge, an experienced representative is available through your Propex distributor to help with your special conditions.



**CALL 1-800-621-1273 FOR THE PROPEX DISTRIBUTOR NEAREST YOU.**

## STORAGE AND HANDLING

- REFLECTEX should be stored somewhere where it is protected from water and UV from the sunlight.
- REFLECTEX should be elevated off the ground during storage to keep the fabric dry and protect it from damage.
- REFLECTEX should be stored somewhere where it is protected from damage from humans or animals.
- REFLECTEX rolls may be handled by either machinery or hand, depending on what is available on the job.

## SITE PREPARATION

### PREPARATION OF EXISTING SURFACE:

- Patch any potholes or excessively disturbed areas of the existing surface.



- Fill any large cracks or spalling areas.
- Smooth surface by filling any large dips or rutting.

### PREPARATION FOR FABRIC PLACEMENT:

- Sweep surface clean before placing REFLECTEX. Excessive debris may damage the fabric during installation and service.

## FABRIC PLACEMENT OVERVIEW

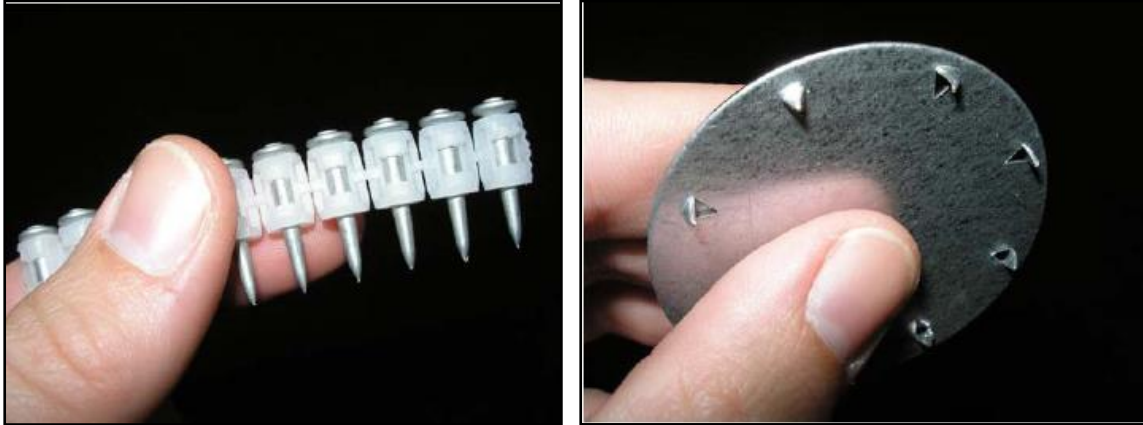
- REFLECTEX should be stored according to the storing and handling instructions until placement.
- REFLECTEX may be transported from storage to placement by machine.
- Placement of the GEOTEXTile can be achieved by rolling out the fabric by hand or machine.
- REFLECTEX should be placed no more than five days before the paving process. Prolonged exposure to the elements may cause damage to the fabric.
- REFLECTEX may be dampened, but not soaked, during installation minimizing concrete bleed through.

- If vehicle traffic is present on the road or slow paving is expected, REFLECTEX should be placed no more than 650 ft (200 m) before the paving process.
- If traffic is expected on the fabric, tight turns and sudden braking and acceleration should be avoided. As this could damage or disturb the placed fabric.
- If REFLECTEX is being placed through an intersection or other area of higher traffic volume, the fabric should be placed immediately before the paving process. This eliminates damage due to the heavy traffic directly on the fabric.
- Adjacent panels of REFLECTEX should maintain an overlap of 6 – 10 in (15 – 25 cm). No overlap should exceed three layers thick.
- Overlaps should be directed away from the direction of paving to reduce the chance of disruption or damaging the fabric during the paving process.
- The free edges of the REFLECTEX panels should extend at least 4 in (10 cm) into a designed drainage area.
- REFLECTEX panels should be fixed into place with nails on 6 ft (2 m) centers max. The nails should be driven through 2 – 3 in (5 – 7.5 cm) galvanized washers.



## FASTENER EVALUATION

1. Hilti nail guns or equivalent are preferred fastening equipment. These apparatuses can vary in power due to CO<sub>2</sub> or Butane cartridges or battery powered.
2. All nail lengths shall be verified for the type of existing pavement before installation begins. Normally ¾ inch nails for PCC existing pavements and 1 and ½ inch nails for asphalt or Cement Treated Base (CTB) existing substructures.
3. Fastening guns and nails should be tested on the existing pavement prior to fabric installation to ensure the nails can be driven to their full depth.
4. After evaluation choose the fastener device that provides enough power to drive the select nail into the existing pavement on a consistent basis.
5. Each nail is to be accompanied with a 2-3 inch diameter galvanized washer to prevent pull through.



6. If during installation of the concrete interlayer geotextile, the nail does not fully penetrate the existing pavement, drive another nail and washer next it.

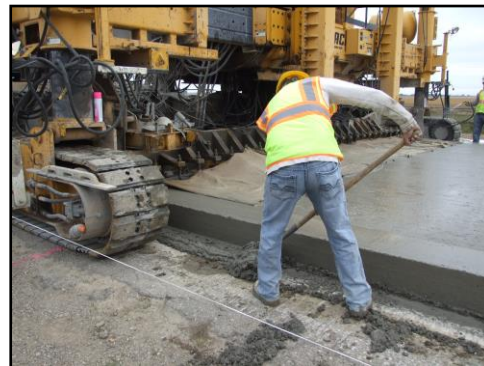


## FABRIC PLACEMENT

1. Place REFLECTEX roll at the starting end of the project.
2. Secure the initial roll end with nails on 3 ft (0.92 m) centers.
3. Unroll REFLECTEX roll down length of project either by hand or machine.
4. Make sure initial panel of REFLECTEX is pulled tight, and beginning from the initial roll end, fasten the panel along the roll edge with nails on 6 ft (2 m) centers. Roll ends and roll edges should not be nailed until adjacent roll is placed and proper 6 in (15 cm) overlap is achieved. If nails do not completely penetrate the fabric drive another nail directly adjacent to the previous nail.
5. Additional REFLECTEX panels may be required to cover the width of the pavement. The following instructions describe the installation.
  - a. Overlapping cannot exceed 3 layers thick; therefore every other initial REFLECTEX panel should have 6-8 feet cut off of the length or should be offset by 6-8 feet until entire width of pavement is covered. Note this is only on the beginning rolls of the project. This will ensure proper shingling of the REFLECTEX Panel while preventing excessive layers at the corners.



6. Place adjacent REFLECTEX roll at the starting end of the project, overlapping the adjacent roll edge by 6 in (15 cm) min.
7. Secure the adjacent roll end with nails on 3 ft (0.92 m) centers. A nail should be placed on the edge-end corner overlap.
8. Unroll REFLECTEX roll down length of project either by hand or machine making sure to maintain a 6 in (15 cm) min. overlap with adjacent roll.
9. Make sure REFLECTEX panel is pulled tight and beginning from the initial roll end fasten the panel with nails on 6 ft (1.83 m) centers. Roll edges/ends to be overlapped should not be nailed until adjacent roll is placed.
10. Repeat Steps 6 through 9 until entire width of project is covered.
11. Place REFLECTEX rolls at the terminal end of the previous REFLECTEX panel. Roll may need to be offset to avoid an overlap greater than 3 panels at the corners. Note: See Step 5.
12. Make sure roll end overlap is shingled in the direction of paving. Secure end overlap with two rows of nails offset on 3 ft centers.
13. Unroll REFLECTEX roll down the length of the project either by hand or by machine.
14. Make sure unrolled panel of REFLECTEX is pulled tight and beginning from the initial roll end fasten the panel with nails on 6 ft (1.83 m) centers. Make sure roll end overlap is shingled in the direction of paving. Secure end overlap with two rows of nails offset on 6 ft centers. Roll edges to be overlapped should not be nailed until adjacent roll is placed.
15. Repeat Steps 10 through 14 until entire project is covered. Note: No more than 1000 feet of fabric should be in front of paver at the end of the paving day.



## CONCRETE OVERLAY PLACEMENT

- Concrete overlay should be placed directly on top of the placed REFLECTEX.
- Care should be taken not to disturb the REFLECTEX. If wrinkles do occur see the maintenance section for proper repair method.
- Care should be taken when trucks dump into the paving apparatus or on the fabric itself. Trucks should release the emergency parking break or release the break when dumping into the paver to prevent damage to the geotextile. Truck should avoid sharp turns, hard breaking, and quick acceleration at all times.
- Overlay should be placed according to the project plans.

## MAINTENANCE

- If wrinkles occur, use safety approved razor knife to cut at the crest of the wrinkled fabric.
- Lay the cut fabric over the other so that the edge of fabric moves with the flow of paving operation and fasten down with nails and washers every 3-4 inches.

