

Last update: May 10, 2012

Geotextile Approved Products List for Adhesive Seams:

Background: Products submitted and approved for use as MnDOT Spec. 3733 Geotextile adhesive seams are only those contained on this list. The products have undergone thorough reviews and testing. Not all applications are suitable for adhesive type connections, and as with sewing a quality seam is only as good as the procedure followed to make said seam. At this time adhesive bonded seams may only be used on Types 1 to 5 geotextiles. Those include polypropylene (PP) slit tape woven and polypropylene needle punched nonwoven. Polypropylene high strength (Type 6 geotextile for example) multifilament woven adhesive seams are generally not acceptable. Consult with the MnDOT Geotechnologies Engineer, Blake Nelson 651-366-5599 for special cases. Adhesive on polyester high strength multifilament woven geotextiles would only be used as a light duty holding aid during placement employing an overlapped type of placement. Because Types 1-4 are mostly for drainage applications care must be taken not to coat an excessive amount of the geotextile with the

adhesive and thereby compromising the function of the material.

Because only one adhesive product is approved at this time agencies should keep sewn seams as an option when preparing bidding documents.

Approved Products:

3M™ Scotch-Weld™ Holdfast Cylinder Adhesive 70.

Installation notes and specification requirements:

Installer must spray both sides of the fabric.

Six inch minimum bonded overlap is required.

This link has product information, a Material Safety Data Sheet (MSDS), installation video

http://solutions.3m.com/wps/portal/3M/en_US/Building-Trades/Construction/Contractor-Solutions/Geotextile-Solutions/

Important considerations for a satisfactory seam may include extreme temperature variations, wet vs. dry material, adhesive application rate, dirty material at seam location, etc. Pressure applied to the seam from a

roller or other similar method is suggested to make a secure seam. Testing results indicate some variation in strength results with standard deviations more than for a comparable sewn seam. Operator skill and experience may contribute to the quality of the seam. Testing will be required per the project Schedule of Materials Control.