TECHNICAL BULLETIN # 1013

SUBJECT: R-TECH FASTENING PATTERNS UNDER MECHANICALLY FASTENED SINGLE PLY MEMBRANES

DATE: JANUARY 31, 2003

Insulfoam manufactures several insulation systems for use beneath mechanically attached single ply membranes. The family of R-Tech products has been a product of choice on numerous roofs where the existing roof is recovered with a new mechanically fastened single ply. In these applications the frequency of fasteners placed through the insulation is a factor that must be taken into account for bidding a project.

Fastening of the insulation in mechanically fastened single ply roof applications does not help or detract from the uplift rating of the membrane system. The uplift capability of a system is determined by the membranes inherent strength and/or the fasteners used to attach the membrane. Fastening of the insulation is done to make sure the insulation lies flat under the membrane, does not blow off during installation and does not shuffle under the membrane.

R-TECH is available in 4’ x 8’sheets as well as a lay flat fanfold. In the case of 4’ x 8’ sheets a minimum of four fasteners should be used as shown in figure 1. Fanfold is available in 4’ x 50’ with folds every 2’. These products should be laid out so that the length of the fanfold is perpendicular to the seams in the membrane. Fasteners are to be placed at the corners of the initial fold piece and then at a rate of one fastener every 12 square feet as shown in figure 2.

The above fastener frequency and placement are the minimum recommended by Insulfoam. Additional fasteners may be required for temporary securement of the material in windy conditions. Should there be any questions regarding the fastening of R-TECH beneath mechanically fastened single ply membranes contact Insulfoam-Technical Center at 1/800-469-8870.