

TECHNICAL BULLETIN

O114CE (supersedes -0210CE)

OBJECT: ROOF DIMENSIONS AND JOINTS

ROOF DIMENSIONS

The maximum surface that can be done without a roof area dividers is not limited by the mechanical properties of SOPREMA membranes. However, different types of joints, as explained below can be recommended or required, on a case-by-case basis.

ROOF AREA DIVIDERS

Roof area dividers can be required, according to the type of system, for very large roofs with irregular forms. See to this effect the Technical Bulletin N° 42 from the Canadian Roofing Contractors Association. Note that this bulletin does not take into consideration the specific properties of SBS modified bitumen membranes (elasticity, cold bending, fatigue resistance, etc.); in fact, these are less subject to cracking than a roof made of organic felts and oxidized bitumen. Moreover, more the system is dimensionally stable (less the materials can move or get out of shape), less the membrane will be solicited. Roofing systems whose insulations are adhered using hot bitumen should have roof area dividers limiting individual roofing sections to a maximum of 15,000 ft².

EXPANSION JOINTS

They must correspond with the structural expansion joints, at the places where the structural support can move. Requires a flexible membrane specially designed to withstand the anticipated multidirectional movements.

PARTITIONING JOINTS (CUT-OFFS)

Good practice demands that a roof on rigid insulation be partitioned in order to limit water propagation in the event of infiltration in the system. These joints are located at the top of the slopes and should coincide with cut-offs, that is to say at every 8,000 to 12,000 ft² considering this represents a surface a roofer can waterproof during a day, according the type of system.

SUMMARY

Partitioning joints: recommended at 10,000 ft² (± 2,000 ft²);

Roof Area Dividers: recommended at 15,000 ft² for systems which the insulation is adhered with hot bitumen;

Expansion joints: required where there is structural movement.

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