



BALTIMORE

spec NEWS

Felt Tips

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ROOF FLASHING

Sheet lead is probably the oldest known flashing material. Being soft, it is easily formed and joints can easily be soldered. It will tolerate a limited amount of movement; but beyond this, will fail from fatigue, and soldered joints will be torn loose. Lead continues to be a well accepted flashing material at a relatively high price.

Sheet copper, normally specified as 16 ounces per square foot, which is approximately 30 mils thick, is considered the top quality flashing for many purposes. It is, of course, stiffer than lead and stronger; thus it will withstand greater stresses; but movement beyond modest limits will develop fatigue cracks and longitudinal expansion will tear soldered joints. Metals in general lack the physical characteristics to be compatible with bitumen roofing systems.

Composition Flashing, butumen type, is the lowest in cost. Low tensile strength makes it susceptible to tearing even with modest movement, and to damage by foot traffic. Normally it is installed in 36-inch widths which means there are many joints subject to leakage. Inadequate fastening systems quite often cause them to pull loose under modest stress.

The shortcomings of these four types of commonly used flashing systems might lead one to believe that they are totally inadequate but under ideal conditions they have given good service to building owners for many years and architects continue to specify them.

Neoprene (polychloroprene) is a synthetic rubber which does not contain plasticizer. In suitable compounds it has been used for approximately 30 years as cable coating, etc. As a flashing material it can be obtained as a cured sheet or as an uncured sheet. Uncured material which does not have a memory can be readily molded to irregular shapes and after heat air-curing will attain the memory of the form to which it was adhered. When applied to a wall with a contact neoprene adhesive it does not require reglets. Uncured neoprene does not have a shrinkage factor which is built into cured material due to calendaring during manufacturing. Lap joints (neoprene to neoprene) and adhesion to surfaces other than the roofing membrane should be made with adhesive as recommended by the manufacturer. Adhesion to roofing membrane and cant strips can be made with hot asphalt or coal tar pitch. Cold roofing mastics containing naphtha solvents should not be used as they can cause swelling of the sheet. Optional non-staining sheet material can be color coated with 2 coats of Hypalon (chlorosulfonated polyethylene).

Most plastic systems on the market are made of polyvinyl chloride. They are cured sheets which have a memory and can have a shrinkage factor due to calendaring during manufacture. Since they are plastics, they contain plasticizers to make them flexible. Loss of plasticizers can cause them to lose their flexibility and become brittle. In a superior plastic flashing the most costly ingredient is the plasticizer, of which there are hundreds from which the compounder may choose. The prime requirement is one that will not migrate into water or asphalt. Lap joints and adhesion where ultimate strength is required should be made with adhesive as recommended by the manufacturer. Cold roofing mastics containing naphtha solvents can normally be used with plastics. There can be some materials classified under the heading of plastics which do not contain plasticizers. Consult individual manufacturers regarding colors other than black or for field coating with color.