



Control Flow Roof Drains

Part 3

In June, 1969, the CRCA published a technical bulletin warning against the use of drains that are designed to retard the flow of water from the surface of a roof. That warning obviously went unheeded and CRCA felt compelled to issue another bulletin on the subject in October 1975.

The 1975 bulletin reiterated the objections of the 1969 bulletin to the use of control flow drains. In addition, to counteract the inherent dangers in the use of control flow drains, it made the following recommendations:

- 1) Adequate slopes - at least 1:50.
- 2) Extra care in locating drains at the low spots and sufficient drains for free flow of water despite such as expansion joints and control joints.
- 3) Design consideration of the fact that smaller diameter rain water leaders plug more easily.
- 4) Location of roof projections as far as possible from low areas with all projections protected by curbs, flashings and counter flashings. Low profile expansion and control joints should not be used.
- 5) Flashing heights designed to give adequate protection against water entering over the top despite any possible wave action or slush or ice accumulation.
- 6) Metal flashing flange to be supplied and installed with all roof drains.
- 7) Double pour and gravel of all low areas of the roof membrane.
- 8) With the protected membrane system, extra ballast over the insulation in all low areas.

In 1988, the design authorities are again reminded of the eight recommendations above and to properly locate and design overflow scuppers to provide a safety factor for both the waterproofing and structural components of the roof system.

The design community seemed to take the previous bulletins as tacit approval of control flow drains because, if anything, the use of these drains has been increasing. In 1988 CRCA is still opposed to the use of control flow drains and will continue to issue bulletins warning against their use.

(The opinions expressed herein are those of the CRCA National Technical Committee)

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