



Technical Bulletin 2021-01

MRGNB Side and End Lap Requirements for Torch Applied Modified Bitumen Membranes

(June 8, 2021)

Intent – This technical bulletin is intended to provide clarity to all those involved in the installation of torch applied modified bitumen cap sheet regarding the requirements for proper side and end lap sealing between overlapping torch applied modified bitumen cap sheets.

The overriding goal is that all modified bitumen cap sheet field and flashings applications, including torch applied modified bitumen cap sheets, be fully bonded to the underlying base sheet and fully sealed to each other. This is particularly important at the side and end laps between adjacent cap sheets.

The following are the MRGNB requirements relating to the sealing of side and end laps in torch applied modified bitumen cap sheets. These requirements are based upon local practice and experience, and upon a consensus of the results of a search of technical publications from the CRCA, other provincial roofing associations (RCABC & ARCA), the NRCA, and the modified bitumen manufacturers participating in the Canadian roofing market.

The modified bitumen membrane cap sheet side and end lap sealing requirements as described herein are consistent with good roofing practice and shall be the minimum requirements applicable to all modified bitumen membrane projects where an MRGNB Warranty is to be issued.

Requirements:

1. The underlying sheet at side and end laps areas are to have either a factory applied plastic torch-off film, an alternate surface finish intended for torch applications, or the granule covered surface of the underlying sheet is to be prepared by embedding the granules into the bitumen with a torch and a heated trowel in accordance with proper trade practice and industry recommendations.





2. The torch applied cap sheet is to be fully bonded to the underlying base sheet and sealed to the underlying cap sheet edges at side and end laps as evidenced by a bead of heated bitumen across the face of the roll during application, extending to or slightly beyond the edges of the cap sheet at both the side laps and overlapping ends.
3. A visible bleed-out of bitumen (3mm to 6mm recommended) at side and end laps is an immediate sign that the lap is securely sealed. Any bleed-out in excess of this amount can be covered with matching granules set in reheated bitumen if so desired.
4. When a bleed-out of bitumen at side and end laps is not visually apparent, the contractor's torch mechanic is required to confirm full width adhesion of the overlap by lightly running a round-ended hand trowel along the laps as part of the Quality Control process. Completion of this process should be documented by the Quality Assurance Observer.
5. If the lap examination reveals inadequate seal of the overlap, the unbonded lap edge is to be lifted with a trowel, the overlapping materials are to be gently reheated and reset into place, applying pressure with a trowel or appropriate hand roller to create a full and continuous seal.
6. Similar lap edge sealing requirements, as described in 3, 4, & 5 above, apply to cold applied cap sheet membrane applications where side and end laps are fully or partially heat sealed with either a torch or hot air welding device.

END

