

5.4 Exterior Sealants & Caulking

5.4.1 Caulking

5.4.1.1 General Requirements

1. Coordinate design with Building Envelope Consultant.
2. Coordinate with Design Consultants for Divisions 23 and 26.
3. The U of C experiences continual failures in exterior caulking on door and window frames, louver frames, cladding joints and other areas of non-movement. Consequently, joint sealants are not to be used as a primary method of waterproofing or shedding water. Appropriate counter flashings and cladding details **MUST** be provided.
4. Only high performance elastomeric sealants are to be used. Sealants must be capable of withstanding dynamically moving joints in exterior applications for long periods of time (typically 20+ years).
5. All joints that receive sealant are to be designed to be 4 times as wide as the anticipated movement. This should include movement due to thermal expansion and contraction as well as structural movement. This is of particular importance at window and door perimeters.
6. Caulking shall be tooled to a smooth concave finish with backer rod to a maximum 1:3 thickness/width ratio.
7. The consultant is to develop details, select sealants, and involve manufacturers so as to obtain high performance, durability, and low-maintenance. Quality assurance programs are to be incorporated in the contract documents particular to the project and developed in concert with manufacturers, specialized trades, and the envelope consultant.
8. Caulking shall never be used to hide or make up for design or construction errors or faults.
9. Where necessary, the colour shall match the adjacent surfaces and shall not be subject to ultra violet degradation or fading.
10. Prior to Start of Work
 - a. List of all proposed sealant materials and installation instructions for review and color samples for selection by FM&D.
 - b. MSDS Material Data Sheets for review and posting at jobsite.
11. At Completion
 - a. Maintenance data shall be an itemized list to include C/W manufacturer/distributor name, sealant type, color formulation and warranties.
 - b. Maintenance Material to include minimum four (4) unopened cartridges of each product/color, labeled including Project Name and Number, to be handed over to U of C FM (obtain receipt) at Project site, for storage within the Project site (ex. designated Janitor Room).

12. Utilize trade contractors who specialize in the application of sealant systems with minimum of 5 years of experience and approved by manufacturer.
13. Select extended warranties for each product as offered by sealant manufacturers.

Revision History

| Revision Date | Version | Description |
|----------------------|----------------|---|
| Feb 2014 | 1.0 | Baseline version |
| August 9, 2023 | 1.0 | Added Revision History table to end of document and reset to Version 1.0. |
| | | |
| | | |
| | | |