

| SUBMITTED TO | DISTRIBUTED TO | SITE VISIT # |
|------------------|---|--------------|
| Wendy Klein, CDP | Wendy Klein, CDP Robert Wait, LMC Mark Carrick, LMC Quinten McElvain, Waechter Judson Moore, Waechter Reed Ledbetter, LMC Dylan Dalton, LMC | 5 |

| SITE ATTENDEES | PROJECT LOCATION | ENVIRONMENTAL CONDITIONS |
|---|--|--------------------------|
| Dylan Dalton, LMC Tom Michie, LMC Martin Houston, QEC | 783 SE 185th Avenue, Portland, Oregon 97233 | 60F, 75% RH Overcast |

SITE VISIT

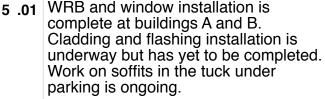
The Rockwood 10 project is a new construction project located in NE Portland, Oregon. The requested site observations on July 14th, 2021 were related to the building enclosure components currently being installed. Areas of specific review included integration of MEP components, windows, and flashing with the WRB system.

Our observations of conditions are limited to the areas observed on July 14th. Below is a photo appendix of our observations followed by an executive summary.

Additional photos were taken while observing the installed work. Not all photos are included in this report, but are available upon request.









5 .02 Building A- Verify that all seams in WRB are properly integrated and sealed prior to installing cladding.



Numerous penetrations have been removed and re-installed at different locations. Re-install sheathing and WRB as necessary, sequencing in a shingle lapped fashion.



5 .04 Storefront sill can detailing should be completed prior to installation of storefront framing members. This miter joint needs to be detailed per manufacturer's instructions.







There are numerous instances of reverse lapped SAM. While terminating the top edge of SAM with sealant is a repair to be used sparingly, it should not be confused as a basis of design detail. Properly sequence WRB and SAM components to prevent reverse laps.

Detailing around exhaust ducts is incomplete. Detail using SAM cut slightly that the pipe diameter and complete detail with liquid flashing from SAM to duct.





5 .07 Related to item 5.03. Detailing around this re-located electrical J box is incomplete.

5 .08 The consistency of reverse lapped installations of SAM and WRB is far too consistent. WRB and SAM are to be properly shingled to shed water.







- 5 .09 Project specific details (11/A6.14) indicate a sealant joint from window head to flashing. Verify that minimum joint size of 1/4" had been provided at all window heads.
- 5 .10 Detailing of frost free hose bibs with flex wrap has resulted in poor adhesion to the pipes. This interface needs to be detailed with SAM and liquid flashing to properly integrate the hose bib with the WRB.





5 .11 Electrical wiring for HVAC equipment is 5 .12 Detailing of conduits on Building F being run through the rainscreen and protected with nailing plates. Verify that this meets electrical code requirements for the type of electrical conduit require in this location.



appears incomplete or poorly installed. SAM should be fully adhered to sheathing substrate and carried out onto the conduit. Additional detailing can be completed using liquid flashing.

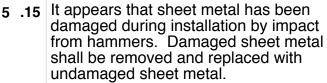






- 5 .13 Detailing of drain pipe with flex wrap has resulted in poor adhesion to the pipe. This interface needs to be detailed with SAM and liquid flashing to properly integrate the drain pipe with the WRB.
- 5 .14 It appears that sheet metal has been damaged during installation by impact from hammers. Damaged sheet metal shall be removed and replaced with undamaged sheet metal.







5 .16 Verify that completed roof venting details (Building F) are in line with project specific detailing.





| 5 | .17 | Building A- Sealant joints between | | |
|---|-----|--|--|--|
| | | storefront subsill and flashing appear | | |
| | | to have been installed without proper | | |
| | | tooling. Remove improperly installed | | |
| | | sealants joints and replace following | | |
| | | manufacturer's requirements for | | |
| | | installation and tooling. | | |
| | | | | |

5 .18 Not Used

| 5 .19 | Not Used | 5 .20 | Not Used |
|-------|----------|-------|----------|
| | | | |
| | | | |
| | | | |



CONCLUSIONS

Cladding installation is ongoing on buildings A and B. Cladding installation is underway on Building C. WRB and windows are largely complete on buildings C-E.

Relocation of MEP penetrations appears to be occurring consistently across the project and creates challenges for proper sequencing of WRB, SAMs and flashings. Coordinate installation of MEP components to avoid removal and re-installation.

The frequency of reverse laps in the WRB system is far too common. Reverse laps indicate a misunderstanding of sequence and should the exception rather than the rule. Treating a reverse lap with sealant should be the approach of last resort, as the WRB /SAM system needs to properly shingle.

Verify that there is adequate space between head flashings and windows for the installation of the sealant joint indicated on 11/A61.4.

DISCLAIMERS

You have hired QEC as a consultant. The scope of QEC's work is limited to visual observations. We do not remove any exterior cladding, windows, or building components. As a result, there may be construction issues or defects which are not visible and not identified by QEC. Concealed issues and defects include water intrusion, structural damage, and microbial growth. You recognize and acknowledge that QEC is not responsible or liable for identifying construction issues or defects which are 1) not part of QEC's scope of work; and 2) not readily and visually observable.

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Our reports, guidelines, and work product are intended only for your use and information. Third-parties may not rely on any of QEC's work product. In the event a third-party claim is asserted against QEC arising out of our work for you, you agree to indemnify, defend, and hold harmless QEC.

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End of Report

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