

APPENDIX M

Architectural Terminology

TERMINOLOGY

A number of terms used in this report have specific meaning and are defined below.

Air Barrier; refers to materials and components that together control the flow of air through an assembly thus limit the potential for heat loss and condensation due to air movement.

Assembly; refers to the collective layers of components and materials which together comprise the complete cross section of wall or roof.

Building Envelope; is an environmental separator, generally between the inside and the outside of a building (including the ground), but also between dissimilar environments within the building.

Capillary Break; the gap between parallel layers of material sufficient to break the surface tension of water, which typically is a minimum of 3/8".

Cladding; a material or assembly, which form the exterior skin of the wall, and is exposed to the full force of the environment.

Concealed Barrier; refers to a strategy for rain penetration control that relies on the combination of the cladding as well as a secondary water shedding plane located further into the assembly to limit water ingress.

Control Joint; a joint in the building envelope permitting differential movement of portions of the building structure, also prevents or localizes cracking of brittle materials such as stucco, where movement needs to be controlled.

Deck; refers to a horizontal surface exposed to the outdoors, located over a living space, and intended for pedestrian use in addition to performing the function of a roof.

Deflection; refers to a water management principle that utilizes features of the building and assembly geometry to limit the exposure of the assemblies to rain.

Drainage; refers to a water management principle that utilizes surfaces of the assemblies to drain water away from the assembly.

Drying; refers to a water management principle that incorporates features and materials that facilitate diffusion and evaporation of moisture from materials that get wet.

Efflorescence; dissolved salts in the material (such as concrete or brick) being transported by water, and re-deposited after evaporation and drying.

Face-seal; building envelope where the performance of the wall is dependant on the ability of the exterior surface of the cladding/windows and associated sealant to shed water. This system cannot easily accommodate water that penetrates past the exterior face since no positive drainage path or additional continuous barrier water is provided.

Fishmouth; deficiency in the installation of waterproofing membranes (roofing, self-adhering membranes, etc.) that results in a fold in the edge of the membrane, through which water can penetrate.

Flashing; sheet metal or other material used in roof or wall construction and designed to shed water (typically sloped outwards and with a drip edge to shed water). Used in conjunction with:

Cap (or parapet) flashing; top of wall (at roof), pier, column or chimney.

Saddle flashing; an upturn, transition piece between a horizontal and vertical ony guardrail wall caps and wall intersection.

Head/sill flashing; at head or sill window or other penetration.

Base flashing; refers to part of the roofing that is turned up at the intersection of a roof with a wall or another roof penetration.

Through-cavity flashing; a flashing that sheds water from the weather barrier plane to the outside (at floor level).

Maintenance; regular process of inspection of envelope elements and systems such as roof, walls, windows, gutters, rain water leaders and drains, cleaning of those items as required and reinstatement of failed elements such as areas of cracked caulking or peeling paint.

Moisture Content; the weight of water contained in wood expressed as a percentage of the weight of oven dry wood.

Parging; a coat cement mortar applied to masonry or concrete walls.

Penetration; an intentional opening through an assembly in which ducts, electrical wires, pipes, and fasteners are run between inside and outside.

Rainscreen; a strategy for rain penetration control that relies on deflection of the majority of water at the cladding; a cavity which provides a drainage path for water that penetrates past the cladding, and air tightness within the assembly to the interior of the cavity which limits pressure differentials across the cladding.

Rehabilitate; a program of comprehensive overall improvements to the building envelope assemblies and details so that it can fulfill its original intended functions.

Renewals; activities associated with expected replacement of worn out components or materials of a building envelope and are typically for items with life cycles in excess of one year.

Repair; replacement or reconstruction of envelope assemblies, components or materials at specific localized areas of the building envelope so that it can fulfill its original intended functions.

Service Life; the actual period of time during which building envelope materials, components and assemblies perform without unforeseen maintenance and renewals cost.

Saddle; transition of horizontal surfaces such as a top of a balcony guardrail or parapet wall with a vertical wall surface.

Sheathing; material (oriented strand board (OSB) or plywood) used to provide structural stiffness to the wall framing and backing for the cladding and sheathing paper.

Sheathing Membrane; material or combination of materials in an exterior wall assembly whose purpose is to retard the penetration of incidental water further into the wall structure once past the cladding. Materials used commonly are building paper and house wrap.

Sheathing Paper; refers to asphalt impregnated organic sheet material (breather type sheathing membrane) which creates a water shedding surface behind the cladding. The permeability of which is rated in minutes (15, 30 and 60 minutes); based on preventing water flowing through it for a number of minutes with a standard test.

Strapping; wood or metal strip material used to form a drainage cavity and capillary break behind the cladding material.

System; describes a combination of materials and components that perform a particular function such as an air barrier system, a moisture barrier system.

UV (Ultra Violet Radiation); component of sunlight which has a degrading effect on materials unless naturally resistant or protected by an appropriate shielding layer.

Vapour Barrier; refers to a material with low vapour permeability which is located within the assembly to control the flow of vapour through the wall assembly and limit the potential for condensation due to diffusion.

Walkway; refers to a corridor exposed to outdoors which provides pedestrian access between suites and stairwells or elevators. It may or may not also be a roof.