BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing

AIBC, EGBC, BOABC

File No: 12-0090 **INTERPRETATION**

Interpretation Date:	April 17, 2018
Building Code Edition:	BC Building Code 2012
Subject:	Absorptive material in wall assembly EW1
Keywords:	Absorptive material, wall assembly
Building Code Reference(s):	Table A-9.10.3.1.A; Table D-2.3.4.A; Table D-2.3.4.C; Table D-2.3.4.D; D-2.3.5.(2)

Question:

Can fibreglass insulation be used in the exterior wall assembly EW1 of Table A-9.10.3.1.A while achieving the stated fire-resistance ratings?

Interpretation:

No.

Wall assembly EW1 is the only wood stud exterior wall assembly in Table A-9.10.3.1.A. It includes a reference to footnote 6 for the absorptive material in the stud spaces. Footnote 6 states "Absorptive material for the higher fire-resistance rating is mineral fibre processed from rock or slag with a mass of at least 4.8 kg/m^2 for 150 mm thickness, 2.8 kg/m^2 for 89 mm thickness….". This excludes fibreglass insulation.

The requirement of the use of mineral wool as an absorptive material is intentional as this material has superior fire resistance to glass batt insulation. This is clearly noted in Table D-2.3.4.D. where the mineral wool receives 15 min of additional time versus glass fibre insulation only 5 min. further discussed in note (1) at the bottom of the table. The exterior wall assembly in Table A-9.19.3.1.A. is generic in principal and in order to apply it, it has to be built as prescribed.

The reference in footnote 6 in Table A-9.10.3.1.A to "…the higher fire-resistance rating…" may cause some confusion with respect to assembly EW1 because EW1 does not have different ratings for different types of insulation, i.e., there is no higher fire-resistance rating in EW1. However, footnote 6 is also referenced from other assemblies whether the higher rating is applicable, and it is not intended to imply that other types of insulation can be used in EW1.

As a note, one may use Tables D-2.3.4.A and D-2.3.4.C to build up a loadbearing wall with the use of one layer of 5/8" Type X GWB and wood studs at 400 O.C. and achieve 1h rating with or without any insulation.

R. J. Light, Committee Chair