## BUILDING CODE VARIANCE



December 2020 19-BCV-018
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#### ADHERED MASONRY VENEER-GENERIC ENGINEERED DETAILS FOR PART 9 RESIDENTIAL BUILDINGS

#### **PURPOSE**

To recognize the acceptability of the values within the document "Adhered Masonry Veneer Installations to a Maximum 3.05m Above Local Grade On Part 9 Residential Units In Alberta" prepared by the Alberta Masonry Council.

#### **DISCUSSION**

Part 9 of the National Building Code-2019 Alberta Edition (NBC(AE)) does not prescribe requirements for this type of installation.

Subsequently Safety Codes Officers (SCO) may request installations be individually engineered under Part 4 of the NBC(AE).

#### **VARIANCE**

This variance provides approximately equivalent or greater safety performance with respect to persons and property as provided for by the *Safety Codes Act* and the NBC(AE).

1. Adhered Masonry Veneer Installations to a Maximum 3.05 m Above Local Grade On Part 9 Residential Units are permitted using the values from the following document:

Adhered Masonry Veneer Installations to a Maximum 3.05 m Above Local Grade On Part 9 Residential Units In Alberta, December 1, 2020

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This report is acceptable in place of project-specific engineering on a case-by-case basis, provided the project-specific details for the "adhered masonry veneers for installed heights to a maximum 3.05 m above local grade on Part 9 residential units" SHALL appear on the drawings

Unless stated otherwise, all Code references in this STANDATA are to Division B of the National Building Code-2019
Alberta Edition

Issuance of this STANDATA is authorized by the Provincial Building Administrator

[Original Signed]
Paul Chang



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submitted for the building permit. Walls that do not meet the criteria for the document "adhered manufactured masonry veneers for installed heights to a maximum 3.05 m above local grade on Part 9 residential units" may need to have site-specific engineering on a case-by-case basis.

2. Attached drawings as applicable must be included in submission.

This VARIANCE is applicable throughout the province of Alberta.

### CASE I: ADHERED MASONRY VENEER WITHOUT DRAINAGE

Where the wall claddings above and/or adjacent to the adhered masonry veneer do not employ drainage, then the adhered stone veneer need not utilize a drainage mat.

## Adhered Masonry Veneer - Typical Wall Cross Section

# Where the wall cladding above and/or adjacent to the adhered masonry veneer does NOT employ drainage: - Adhered thin masonry veneer with AMC approved units

- Min.  $\frac{3}{8}$ " (9.5 mm) THK. Setting Bedding mortar with AMC approved setting bed mortar
- Min. ½" (13 mm) THK, scratch coat with pre-bagged Type S mortar lightly scored with hand broom
- 2.5 lb/yd^2 Galvanized Diamond Wire Self-furring Lath fastened as per AMC pre-engineered requirements
- Weather Resistant Barrier (WRB) as per AMC pre-engineered requirements
- Exterior grade sheathing as per AMC pre-engineered requirements
- 2x6 wood studs at 16" o.c. or 24" o,c,
- Interior sheathing



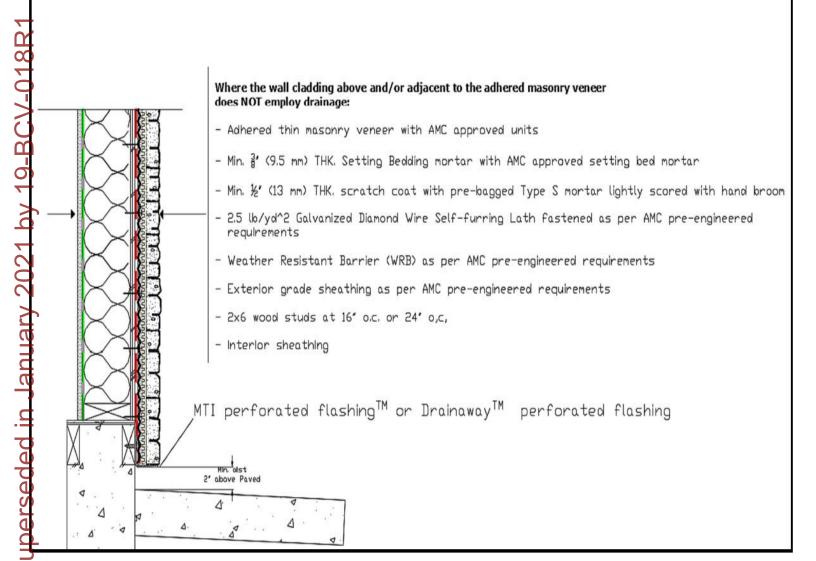
4' above Soll



## <u>Adhered Masonry Veneer - Foundation Detail</u> Where the wall cladding above and/or adjacent to the adhered masonry veneer does NOT employ drainage: - Adhered thin masonry veneer with AMC approved units - Min. & (9.5 mm) THK. Setting Bedding mortar with AMC approved setting bed mortar - Min. 1/2" (13 mm) THK, scratch coat with pre-bagged Type S mortar lightly scored with hand broom - 2.5 lb/yd^2 Galvanized Diamond Wire Self-furring Lath fastened as per AMC pre-engineered requirements - Weather Resistant Barrier (WRB) as per AMC pre-engineered requirements - Exterior grade sheathing as per AMC pre-engineered requirements - 2x6 wood studs at 16" o.c. or 24" o.c. - interior sheathing MTI perforated flashing TM or Drainaway TM perforated flashing



## Adhered Masonry Veneer - Base of Wall Detail I (Wall on curb)



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## Adhered Masonry Veneer - Base of Wall Detail II (Walk-out basement) uperseded in January 2021 by 19-BCV-018R1 Where the wall cladding above and/or adjacent to the adhered masonry veneer does NOT employ drainage: - Adhered thin masonry veneer with AMC approved units - Min. & (9.5 mm) THK. Setting Bedding mortar with AMC approved setting bed mortar - Min. ½" (13 mm) THK. scratch coat with pre-bagged Type S mortar lightly scored with hand broom - 2.5 lb/yd^2 Galvanized Diamond Wire Self-furring Lath fastened as per AMC pre-engineered requirements - Weather Resistant Barrier (WRB) as per AMC pre-engineered requirements - Exterior grade sheathing as per AMC pre-engineered requirements - 2x6 wood studs at 16" o.c. or 24" o.c. - interior sheathing MTI perforated flashing TM or Drainaway TM perforated flashing Min. dist 4' above Soil 2' above Paved

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#### CASE 2: ADHERED MASONRY VENEER WITH DRAINAGE

Where the adhered masonry veneer installation height is to the underside of the first storey roof (i.e. full height wall) OR when the wall cladding above and/or adjacent to the adhered masonry veneer employs a drainage mat the adhered masonry veneer shall utilize a drainage mat.

## Adhered Masonry Veneer with Drainage - Typical Wall Section

Where the adhered masonry veneer height is to underside of roof of the first storey or when the wall cladding above and/or adjacent employs drainage:

- Adhered thin masonry veneer with AMC approved units
- Min. & (9.5 mm) THK. Setting bedding mortar with AMC approved setting bed mortar
- Min. ½" (13 mm) THK. scratch coat with pre-bagged Type S mortar lightly scored with hand broom
- 2.5 lb/yd^2 Galvanized Diamond Wire Self-furring Lath fastened as per AMC pre-engineered requirements
- Min.  $\frac{3}{8}$  (10 mm) THK. drainage mat with AMC approved drainage mat manufacturer
- Weather Resistant Barrier (WRB) as per AMC pre-engineered requirements
- Exterior grade sheathing as per AMC pre-engineered requirements
- 2x6 wood studs at 16" o.c. or 24" o.c.
- interior sheathing

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## Adhered Masonry Veneer with Drainage- Foundation Detail

Where the adhered masonry veneer height is to underside of roof of the first storey or when the wall cladding above and/or adjacent employs drainage:

- Adhered thin masonry veneer with AMC approved units
- Min. 3 (9.5 mm) THK. Setting bedding mortar with AMC approved setting bed mortar
- Mln. ½" (13 mm) THK. scratch coat with pre-bagged Type S mortar lightly scored with hand broom
- 2.5 lb/yd^2 Galvanized Diamond Wire Self-furring Lath fastened as per AMC pre-engineered requirements
- Min. & (10 mm) THK, drainage mat with AMC approved drainage mat manufacturer
- Weather Resistant Barrier (WRB) as per AMC pre-engineered requirements
- Exterior grade sheathing as per AMC pre-engineered requirements
- 2x6 wood studs at 16" o.c. or 24" o.c.
- interior sheathing

Min. allst 4' above Soll 2' above Paved

MTI perforated flashing  $^{\text{TM}}$  or  $\text{Drainaway}^{\text{TM}}$  perforated flashing

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## Adhered Masonry Veneer with Drainage -Base of Wall Detail I (Wall on Curb)

Where the adhered masonry veneer height is to underside of roof of the first storey or when the wall cladding above and/or adjacent employs drainage:

- Adhered thin masonry veneer with AMC approved units
- Min. 3' (9.5 mm) THK. Setting bedding mortar with AMC approved setting bed mortar
- Min. ½' (13 mm) THK. scratch coat with pre-bagged Type S mortar lightly scored with hand broom
- 2.5 lb/yd^2 Galvanized Diamond Wire Self-furring Lath fastened as per AMC pre-engineered requirements
- Min. 3 (10 mm) THK. drainage mat with AMC approved drainage mat manufacturer
- Weather Resistant Barrier (WRB) as per AMC pre-engineered requirements
- Exterior grade sheathing as per AMC pre-engineered requirements
- 2x6 wood studs at 16" o.c. or 24" o.c.
- interior sheathing

2" above Paved

MTI perforated flashing™ or Drainaway™ perforated flashing

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# <u>Adhered Masonry Veneer with Drainage</u> - Base of Wall Detail II (Walk-out basement)

Where the adhered masonry veneer height is to underside of roof of the first storey or when the wall cladding above and/or adjacent employs drainage:

- Adhered thin masonry veneer with AMC approved units
- Min. 8" (9.5 mm) THK. Setting bedding mortar with AMC approved setting bed mortar
- Min. 1/2" (13 mm) THK, scratch coat with pre-bagged Type S mortar lightly scored with hand broom
- 2.5 lb/yd^2 Galvanized Diamond Wire Self-furring Lath fastened as per AMC pre-engineered requirements
- Min. 3" (10 mm) THK. drainage mat with AMC approved drainage mat manufacturer
- Weather Resistant Barrier (WRB) as per AMC pre-engineered requirements
- Exterior grade sheathing as per AMC pre-engineered requirements
- 2x6 wood studs at 16" o.c. or 24" o.c.
- interior sheathing

MTI perforated flashing™ or Drainaway™ perforated flashing

Min. dist 4' above Soll 2' above Paved

Superseded in January 2021 by 19-BCV-018R1