

Flood Resistant Design TAG

Meeting Notes

Date: Tuesday, August 17, 2021

Meeting Location: WebEx Event

Call to order:

Greg Metz called the meeting to order at 9:01 AM

Attendance:

TAG Members present: Greg Metz (DLI), Chris Rosival (DLI), Andrea Crabtree Naves (City of Moorhead) Vincent DiGiorno (KOMA Architects & Engineers), Christian Faste (City of Burnsville), Dan Korf (Houston Engineering), and Ceil Strauss (MN DNR)

Guests attending: Amanda Spuckler (DLI), Chad Payment (DLI), Jeff Lebowski (DLI), Brittany Wysokinski (DLI), Steve Shold (DLI), Kristen Ober, Nick Erickson, and Barbara Conti

1. Call to order

- WebEx instructions/procedures

2. Reviewed existing Minnesota Rules, chapter 1335, the 1972 edition of “Flood Proofing Regulations,” and ASCE 24-14, as discussed below.

ASCE 24-14 Section 4.5.3

Section 4.5.3 requires foundations below the Design Flood Elevation to comply with floodproofing criteria. The TAG members’ consensus is not to modify this section.

ASCE 24-14 Section 1.4.3

Section 1.4.3 classifies commercial storage as Flood Design Class 2 unless hazardous materials are stored and allows the parking of vehicles, building access, and storage below the Design Flood Elevation. The TAG members’ consensus is not to modify this section.

ASCE 24-14 Section 6.2.3

The TAG members discussed the use of bulkheads in dry floodproofing for commercial buildings, which is permitted by section 6.2.3.

“Floodproofing Regulations” chapter 12

The TAG members compared chapter 12, which permits the use of sump pumps to prevent flooding, to the requirements of ASCE 24-14. ASCE 24-14 does not permit reliance on sump pumps to prevent flooding but does not prohibit their use. The TAG members’ consensus is not to modify ASCE 24-14 to permit reliance on sump pumps.

ASCE 24-14 Section 7.1

Section 7.1 requires HVAC equipment to be placed above the Design Flood Elevation. At a previous meeting, the TAG consensus was to modify the definition for “substantial improvement” to address existing conditions that are below Design Flood Elevation, including equipment replacement.

ASCE 24-14 Section 7.4

This section requires gas or oil-fired furnaces to have a float installed in the fuel supply line to operate when flood waters rise above Design Flood Elevation. This is similar to the current requirement in section 1301.2.1 of “Floodproofing Regulations.” The TAG members’ consensus is not to modify this requirement.

Section 7.4 also requires ducts and ductwork below the Design Flood Elevation to be designed to resist flood-related loads and to prevent flood water from entering the ductwork. “Floodproofing Regulations” permits ductwork to be flooded and cleaned. The TAG members’ consensus is to modify section 7.4 to require ducts and ductwork to be designed, constructed, and installed to help prevent flood water from entering and any ductwork that must be located below the Design Flood Elevation must have openings that allow for drainage and cleaning.

ASCE 24-14 Section 7.3.4

The TAG members’ consensus is not to modify the prohibition on protection contingency plans in this section because it is consistent with the policies of municipalities to prevent floodwater from entering the sanitary system. The TAG members’ consensus is to modify the requirements for tanks to refer to Minnesota Rules, chapter 7080.

ASCE 24-14 Section 7.3.3

The TAG members’ consensus is to add an exception for buildings constructed in accordance with FEMA Technical Bulletin 10-01 or located in a jurisdiction with a FEMA basement exception.

Meeting Adjourned: 9:58 AM

Prepared by: Greg Metz