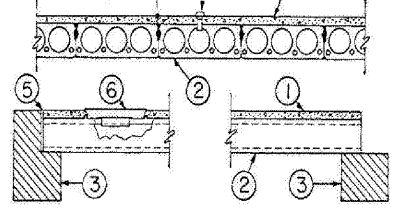


# UL Design No. J919

April 26, 2019

Restrained Assembly Rating — 2, 3 and 4 Hr. (See Items 1 & 2)  
Unrestrained Assembly Rating — 2 Hr.  
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Restrained End Detail Unrestrained End Detail

Table with 2 columns: Rating Hr, Min. Thkns. in. Rows include 2 Hr (3 mm) and 3 Hr (3 mm).

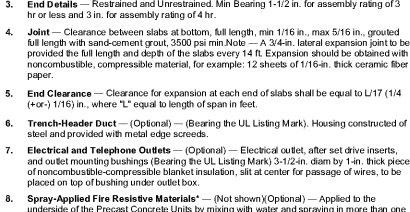
- 1A. Floor Topping Mixture — Alternate to Item 1 — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.
- 1B. Floor Topping Mixture — Alternate to Item 1 and 1A — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

# UL Design No. J927

April 30, 2019

Restrained Assembly Rating — 2 Hr.  
Unrestrained Assembly Rating — 112 Hr.  
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Restrained End Detail Unrestrained End Detail

Table with 2 columns: Rating Hr, Min. Thkns. in. Rows include 2 Hr (3 mm) and 3 Hr (3 mm).

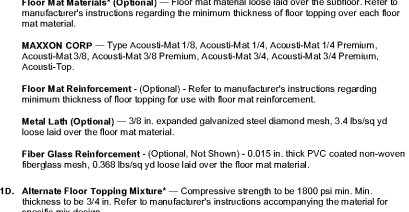
- 1. Concrete Topping — 3000 psi compressive strength, 110 to 153 pcf unit weight. Normal weight aggregate. The min concrete topping thickness is 3/4 inch from Item Nos. 6 and 7 are used. When Item Nos. 6 and 7 are not used, the minimum concrete topping thickness shall be as follows:
- 2. Floor Topping Mixture — Alternate to Item 1 — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

# UL Design No. J957

April 30, 2019

Restrained Assembly Rating — 2 and 3 Hr. (See Item 1)  
Unrestrained Beam Rating — 1, 1-1/2, 2, 3 and 4 Hr. (See Items 8, 9A)  
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Restrained End Detail Unrestrained End Detail

Table with 2 columns: Rating Hr, Min. Thkns. in. Rows include 2 Hr (3 mm) and 3 Hr (3 mm).

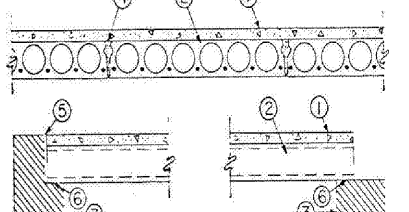
- 1. Concrete Topping — 3000 psi compressive strength, 110 to 153 pcf unit weight. Normal weight aggregate.
- 2. Floor Topping Mixture — Alternate to Item 1 — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

# UL Design No. J977

April 30, 2019

Restrained Assembly Rating — 2 Hr.  
Unrestrained Assembly Rating — 2 Hr.  
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Restrained End Detail Unrestrained End Detail

Table with 2 columns: Rating Hr, Min. Thkns. in. Rows include 2 Hr (3 mm) and 3 Hr (3 mm).

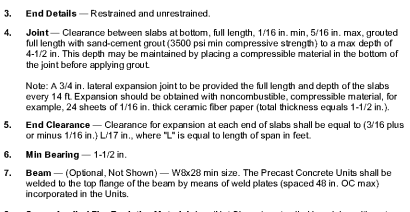
- 1. Concrete Topping — 3000 psi compressive strength, 110 to 153 pcf unit weight. Normal weight aggregate.
- 2. Floor Topping Mixture — Alternate to Item 1 — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

# UL Design No. J997

April 30, 2019

Restrained Assembly Rating — 2 Hr.  
Unrestrained Assembly Rating — 2 Hr.  
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Restrained End Detail Unrestrained End Detail

Table with 2 columns: Rating Hr, Min. Thkns. in. Rows include 2 Hr (3 mm) and 3 Hr (3 mm).

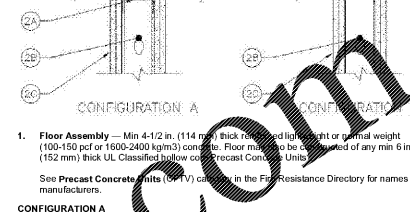
- 1. Concrete Topping — 3000 psi compressive strength, 110 to 153 pcf unit weight. Normal weight aggregate.
- 2. Floor Topping Mixture — Alternate to Item 1 — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

# UL Design No. HW-D-0036

September 01, 2016

Assembly Rating — 1 and 2 Hr (See Item 2)  
Nominal Joint Width — 3/4 in.  
Class II Movement Capabilities — 33% Compression or Extension  
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Restrained End Detail Unrestrained End Detail

Table with 2 columns: Rating Hr, Min. Thkns. in. Rows include 2 Hr (3 mm) and 3 Hr (3 mm).

- 1. Floor Assembly — Min 4-1/2 in. (114 mm) thick floor assembly consisting of a 3/4 in. (19 mm) thick UL Classified hollow concrete core, 1/2 in. (12.7 mm) thick UL Classified hollow concrete core, and a minimum of any min 5/16 in. (7.9 mm) thick UL Classified hollow concrete core.
- 2. Wall Assembly — The wall assembly shall consist of a gypsum board/steel stud wall assembly shall be constructed of the materials and in the manner described in the individual UL400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

RAD ARCHITECTURE Ragona Architecture & Design, PLLC 145A Scalespark Road, Charlotte, NC 28209 T: 784.372.0116 www.rad-arch.com

WARREN & NORMAN ARCHITECTS P.A. CERT NO. 52928

STRAND HOSPITALITY SERVICES

HOME 2 SUITES BY HILTON

HOME 2 SUITES BELMONT HAWLEY AVE BELMONT, NC 28012

KEY PLAN

Revisions

Project Number: 18021  
Issued for: CONSTRUCTION  
Issue Date: 2019-06-07

DRAWING TITLE  
UL DESIGN ASSEMBLIES

SHEET NUMBER  
G.301