



NEW YORK STATE DEPARTMENT OF STATE
STATE FIRE PREVENTION AND BUILDING CODE COUNCIL

Certificate of Acceptability No. 0044

George E. Pataki
Governor

Alexander F. Treadwell
Secretary of State

Expiration date : June 30, 2002

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1. MANUFACTURER

National Gypsum Company
1650 Military Road
Buffalo, New York 14217-1198
Telephone (716) 873-9750, Fax (716) 873-9753

Phillips Manufacturing Company
504 Walnut Street
Niles Ohio, 44446
Telephone (330) 652-4335, Fax (330) 652-3982

2. PRODUCT

Gold Bond Area Separation Wall-Solid Type

3. USE

Two -hour party/fire wall not exceeding two stories or 30 feet in height for use in buildings of group A1, A2, B1, B2, B3 and B4 occupancies.

4. DESCRIPTION

4.1 General

The wall assembly consists of 2-inch deep Phillips Manufacturing Company steel H-studs which secure the vertical edges of abutting double 1-inch thick by 2-feet wide Gold Bond Fire -Shield Shaftliner panels, covered on each side with 1/2-inch thick Gold Bond Fire Shield G Moisture Resistant gypsum wall board, and installed over and screw attached to the H-studs to create a vertical non-loadbearing noncombustible party/fire wall. As an alternative to the 1/2-inch thick Gold Bond Fire-Shield G Moisture Resistant gypsum wallboard, either 1/2-inch thick Gold Bond Fire-Shield G gypsum wallboard, 5/8- inch thick Gold Bond Fire-Shield wallboard , or 5/8-inch thick Gold Bond Fire-Shield gypsum sheathing may be used.

The base of the wall assembly is laterally supported at the foundation by a Phillips Manufacturing Company "U" shaped steel track fastened with power-driven or other appropriate anchors, and at floor and ceiling levels by attaching aluminum angle clips to the building wood framing. If exposed to fire, the aluminum clips melt and break away permitting construction damaged by fire to collapse while the party/ fire wall remains in tact, thereby maintaining protection of adjacent construction.

4.2 System Components

4.2.1 Steel "U" Track

Phillips Manufacturing "U-Track," nominal 25 gauge, 2-inch wide web with 1- inch deep flanges, hot-dipped galvanized steel.

4.2.2 Steel Stud

Phillips Manufacturing "H-Stud," nominal 25 gauge, 2-inch wide web with 1-1/2 -inch overall width flanges, hot-dipped galvanized steel.

4.2.3 Wall Board Core

Gold Bond Fire-Shield Gypsum Shaftliner, 1-inch thick x 24 inches wide (ASTM C 442).

4.2.4 Wall Board Sheathing

Gold Bond Fire-Shield G Moisture Resistant 1/2- inch thick gypsum wall board , Gold Bond Fire-Shield 1/2-inch thick gypsum wall board, 5/8- inch thick Gold Bond Fire-Shield gypsum wallboard , or 5/8-inch thick Gold Bond Fire-Shield gypsum sheathing.

4.2.5 Angle Clip

Aluminum angle clip 1-inch x 2-inch x 2-inch to 2-inch x 2-1/2-inch x 2-inch x 0.05-inch, or 0.063-inch thick.

4.2.6 Fasteners

1-inch Type S drywall screws, 1-1/4-inch Type W drywall screws and 3/8-inch Type S pan head screws.

4.2.7 Fire Stopping

Gypsum board strips, or rock wool mineral fiber-safing insulation (4 pcf nominal density).

4.3 Field Erection

4.3.1 Fire Stopping

Rock wool mineral fiber safing insulation (4 pcf nominal density) which is rated noncombustible according to NFPA Standard 220 when tested in accordance with ASTM E 136, or gypsum board strips shall be used to fire stop openings adjacent to the party fire wall at floors and ceilings levels and at terminations with roof decks or exterior walls as shown in Figures No. 1 & 2.

For one-and two-family dwellings, the party/fire wall shall extend at least 6 inches above roofs and beyond exterior walls of combustible construction. As an alternative, the party/fire wall may terminate at the underside of a roof and at the interior surface of an exterior wall where such roof and wall are protected construction having the same fire resistance rating as the party/fire wall, for a distance of at least 18 inches at both sides of the party/fire wall.

For multiple dwellings, party/fire walls shall extend at least 24 inches above roofs and at least 12 inches beyond exterior walls. As an alternative, party/fire walls may terminate at the underside of a roof, and at the interior surface of an exterior wall where such roof and wall have a fire resistance rating of less than 3/4 hour, and are protected with noncombustible construction having the same fire resistance rating as the party/wall for a distance of at least 24 inches at both sides of the party/fire wall.

Party fire/walls may terminate at the underside of a noncombustible roof, and at the interior surface of a noncombustible exterior wall where such roof and wall have a fire resistance rating of at least 3/4 hour. Party/fire wall projections through roof decks or exterior walls shall be covered by noncombustible flashing that will resist corrosion and galvanic action, and be designed to have a sliding and slip-type ability that will allow for expansion or fire collapse.

4.3.2 Openings in Fire Walls

Openings are permitted in fire walls as described herein. There shall be no openings permitted in the party wall. Openings are permitted for doors not exceeding 44"x 84" and for large ducts, or groups of ducts not exceeding 5 square feet. Such openings shall be framed around the full perimeter of the opening with suitable steel studs and channels to maintain adequate support for the wall, and shall be protected by an opening protective having a fire resistance rating of at least 1-1/2 hour installed in accordance with the terms of its listing by a recognized testing agency.

Penetrations through the gypsum panels to permit passage of noncombustible pipes, small ducts, and electrical conduits shall be permitted in fire walls provided any such opening does not exceed 20 square inches in any 100 square feet of the face of the fire wall, and that the size of any such penetration that would permit the passage of flames and hot gases be no more than 1/2" larger than the outside dimensions of the pipe, small ducts, and electrical conduits. Penetrations shall be tightly fire stopped using mineral fiber safing insulation or FS 90 Fire-Shield Compound .

4.3.3 Field Erection

The maximum height of a course of H-studs and gypsum panels shall not exceed 10 feet. The erection process is repeated for each course of gypsum panels and metal framing up to a maximum height of 30 feet. The assembly consists of two layers of 1-inch thick 24-inch wide Fire-Shield Shaftliner Panels installed vertically between two "U" Tracks. The long edges of the panels are inserted in the H-studs at 24" o.c. for the full length of the party/fire wall. The "U" Tracks are installed as a base channel attached to the foundation with power driven fasteners at ends and 24" o.c., as a cap at the top of the wall, as end details and framing around openings and screwed back to back between two vertical courses of panels within 2 feet of an intermediate floor . Both sides of all corner "U" Track flanges are fasten with two 3/8" Type S screws.

Both sides of each H-stud are secured to the "U" Tracks at the top and bottom of the liner panels with 3/8-inch Type S pan head screws. Both sides of each H-stud are attached to the adjacent wood framing at each floor level and at the roof ceiling intersection with aluminum angle clips designed to break away when exposed to fire. The aluminum clip is attached to the H-stud with a 3/8" Type S pan head screw and to the wood framing by one 1-1/4" Type W screw. For walls over 23 feet, additional clip angles are needed midway between floors (5' o.c.) for the wall section below the upper most 23 feet. The assembly is covered with 1/2-inch thick Gold Bond Fire-Shield G Moisture Resistant gypsum wall board, or alternate as stated in 4.2.4, secured vertically to both sides of the H-studs with 1" Type S screws spaced 12" o.c., staggered 6" in the vertical joint. As an alternative, the aluminum clip may be attached to the H-stud through the 1/2-inch gypsum liner cover with a 1" Type S screw (See Figure 1).

5. BASIS FOR ACCEPTABILITY**5.1 Applicable Code Section**

- 5.1.1** NYS UFPBC Section 606.3(a)(84) defines *fire wall* as a wall of noncombustible construction, with qualities of fire resistance and structural stability, which completely subdivides a building into fire areas and which resists fire spread.
- 5.1.2** Section 610.1(d) requires assemblies of building construction to be tested in accordance with reference standard RS 4-1, ASTM Standard E119-88 for fire endurance rating.
- 5.1.3** The State Fire Prevention and Building Code Council has adopted as test procedures for "fire walls and or /party walls" the ASTM Standard E119-88 Section 9 Fire Endurance Test and Section 10.3 Hose Stream Test Optional Program.

5.2 Submitted Information

- 5.2.1** Drawings have been provided and are on file representing a typical wall section with the system components noted in the details.
- 5.2.2** Warnock Hersey International, Fire Laboratories Division, Report No. WHI-11655-762 successfully completed the code council test procedures for party/fire walls in accordance with ASTM Standard E119-88. The product compliance satisfies the requirement of 9 NYCRR 610.1(d) for a 2 hr fire resistance rating.

6. CONDITIONS OF ACCEPTABILITY

- 6.1** This certificate is valid for a period of two years from date of issuance unless sooner revoked, and is subject to renewal thereafter. Certificates that are not re-certified shall not be used or referred to. In order to determine the current certification status, please contact the Division of Code Enforcement and Administration at (518) 474-4073, or www.dos.state.ny.us/code/camenu.html
- 6.2** Materials and methods of construction shall conform to the manufactures instructions, test results, brochure, specifications and drawings on the approved installation and use of the product submitted to and on file with the Division.
- 6.3** Any conflicts between this certificate and the manufactures installation instructions void this certificate.
- 6.4** A registered architect, licensed professional engineer, or approved inspection agency shall certify to the building official that the party/fire wall assembly as installed complies with the requirements set forth in the Certificate of Acceptability.
- 6.5** The party/fire wall and building shall conform with the requirements of subdivision 4.3 above for fire stopping, openings in walls, field erection and sound transmission.
- 6.6** The party/fire wall shall serve as a nonbearing, noncombustible wall.
- 6.7** In the event the party fire wall becomes exposed to the exterior, the authority having jurisdiction shall be require the person having a responsibility for the building to cover the exposed side of the wall with material that will provide adequate protection so that it can serve as an exterior wall.

7. INFORMATION TO BE SUBMITTED TO CODE ENFORCEMENT OFFICIAL

In order to aid in determination of compliance with this certificate, documents submitted to officials charged with enforcement of the Code shall reflect at a minimum the following information:

- 7.1** Manufacturer Installation Instructions
- 7.2** Construction Installation documentation with typical cross sections and details
- 7.3** Certification of Installation

8. PRODUCT IDENTIFICATION

- 8.1** All structural elements referred to in the manufacture's literature are proprietary Gold Bond products and Phillips Manufacturing hardware and shall bear the manufacture's name and model number

9. REFERENCED INFORMATION

- 9.1** This area separation wall was previously covered under Certificate of Acceptability No. 554-87-MC as amended in September, 1997.

NEW YORK STATE DEPARTMENT OF STATE
 UNIFORM FIRE PREVENTION AND BUILDING CODE
 CODES DIVISION
CERTIFICATE OF ACCEPTABILITY

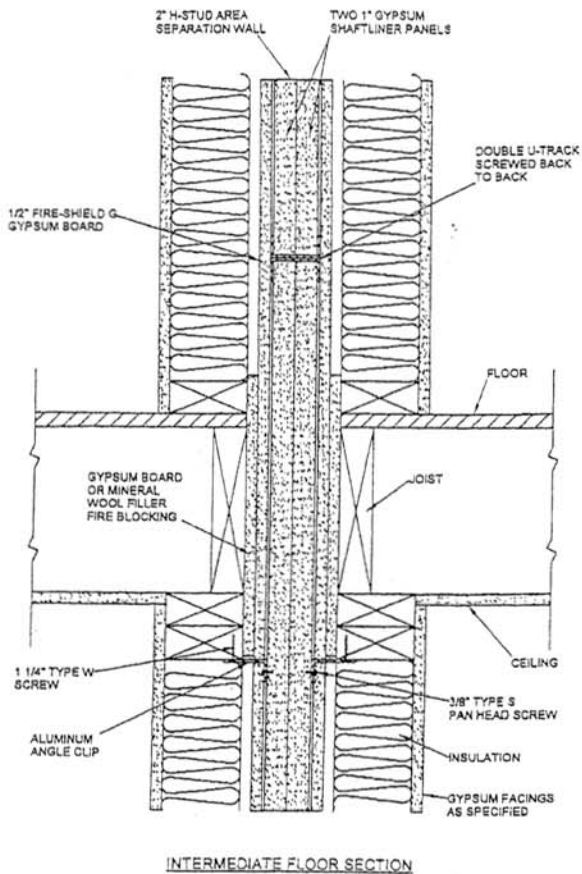


Figure 1

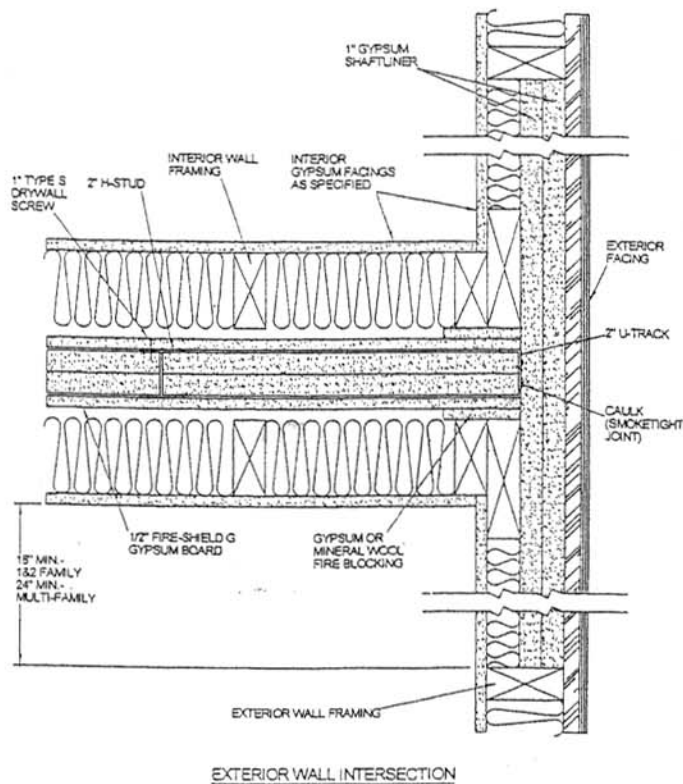
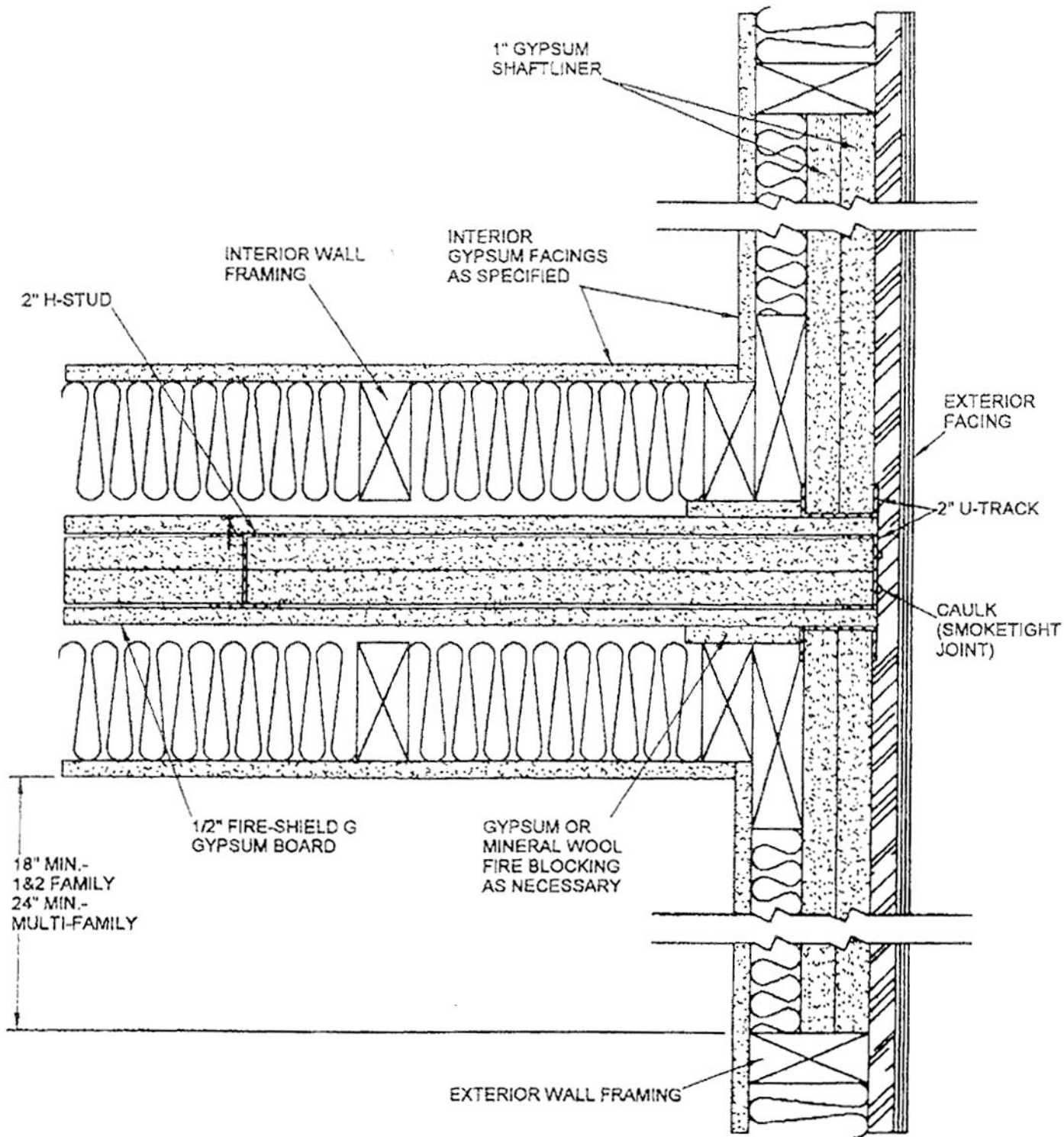


Figure 2

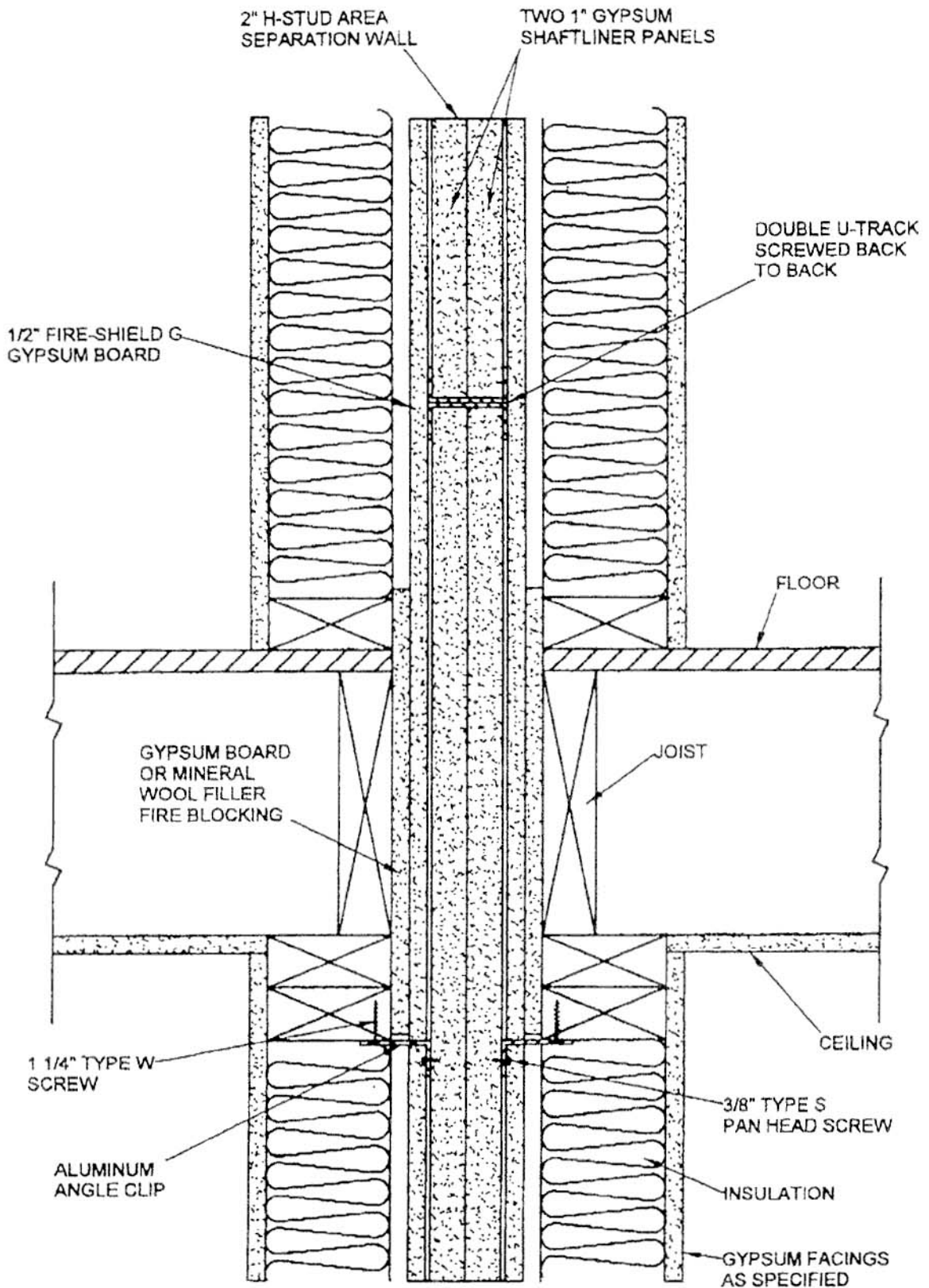
This Certificate of Acceptability certifies that the State Fire Prevention and Building Code Council has determined that the product specified in Division File No. CA 0044 complies with the performance requirements set forth in the New York State Uniform Fire Prevention and Building Code when installed in accordance with the Conditions of Acceptability listed under Section 6 above. Please contact the Division with any questions you may have regarding this certificate or if you have any information on the performance of the product described herein which is contrary to this certificate.

Date of issuance: June 30, 2000

George E. Clark, Jr.
 George E. Clark, Jr.
 Director of Code Enforcement and Administration



EXTERIOR WALL INTERSECTION



INTERMEDIATE FLOOR SECTION