



LISTING INFORMATION OF ClarkDietrich Steel 'C-T' Stud and Tabbed 'J' Runner Fire-resistance-rated Shaftwall and Stairwall Wall Assemblies

SPEC ID: 26661

ClarkDietrich Building Systems  
9100 Centre Pointe Drive, Suite 210  
West Chester, OH 45069

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**PRODUCT DESCRIPTION:**

'C-T' Stud, galvanized steel, roll-formed and punched, minimum 2-1/2" deep by 0.019" thick.  
 'J' Runner, galvanized steel, roll-formed and punched, minimum 2-1/2" deep by 0.019" thick.

**SYSTEM DESCRIPTION** (unless otherwise noted, fire ratings apply to tests conducted on both sides):

- | Assembly Rating: 1-hour, Non-load bearing shaftwall assembly, Design weight: 6.5 psf (refer to Design CD/WA 60-01)
- | Assembly Rating: 2-hours, Non-load bearing shaftwall assembly. Design weight: 8.5 psf (refer to Designs CD/WA 120-01).
- | Assembly Rating: 2-hours, Non-load bearing Stairwall assembly, Design weight: 8.5 psf (refer to Designs CD/WA 120-02).

Designs listed are minimum construction requirements to achieve fire rating.

**Evaluated to the following** (Unless otherwise noted, the assemblies in this section have been evaluated for conformance to the following standards):

- ASTM E119, *Standard Methods of Fire Tests of Building Construction and Materials*
- CAN/ULC S101, *Standard Method of Fire Endurance Tests of Building Construction and Materials*
- NFPA 251, *Fire Test of Building Construction and Materials*
- UL 263, *Fire Tests of Building Construction and Materials*

<b>CERTIFIED FOR USE IN THE FOLLOWING ASSEMBLIES</b>	
<b>Wall Assembly Design Number‡</b>	<b>Corresponding Assembly Listee</b>
CD/WA 60-01	ClarkDietrich Building Systems
CD/WA 120-01	ClarkDietrich Building Systems
CD/WA 120-02	ClarkDietrich Building Systems
CB/WA 120-01†	Continental Building Products
CB/WA 120-02†	Continental Building Products
GP/WA 60-01†	Georgia-Pacific Gypsum
GP/WA 120-01†	Georgia-Pacific Gypsum
GP/WA 120-02†	Georgia Pacific Gypsum

‡Designs are based on, and supported by, proprietary test reports. The test reports further define proprietary design details which make these listings applicable only to the specified products manufactured by the listed manufacturer.

†Design Listings are located in the respective Continental Building Products or Georgia Pacific Gypsum Listing Reports

<u>Attribute</u>	<u>Value</u>
Assemblies	Fire Rated Wall Assembly Un-Loaded
Criteria	UL 263 (2003)
Criteria	NFPA 251 (2006)
Criteria	ASTM E119 (2007)
Criteria	ASTM E119 (2008a)
Criteria	UL 263 (2011)
Criteria	ASTM E119 (2012a)
Criteria	ASTM E119 (2015)
CSI Code	09 22 16.13 Non-Structural Metal Stud Framing
CSI Code	09 21 16.23 Gypsum Board Shaft Wall Assemblies
Fire Resistance	1 Hour Wall Assembly
Fire Resistance	2 Hour Wall Assembly
Intertek Services	Certification
Listed or Inspected	LISTED
Listing Section	ADDITIONAL COMPONENTS FOR WALL ASSEMBLIES
Listing Section	WALL ASSEMBLIES
Report Number	WHI-495-1127, 1128, 1131, 1133; WHI-495-1201, 1207, 1208, 1223; G102580393; G102619004
Spec ID	26661
Verification Testing	No

## DRAWING INDEX

CD/WA 120-01

CD/WA 120-02

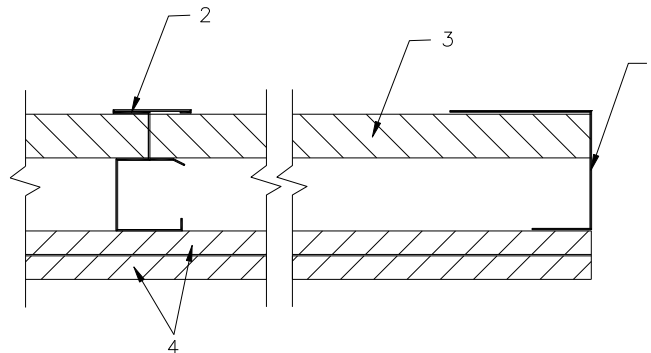
CD/WA 60-01

**CD/WA 120-01**

**Division 09 – Finishes**  
**09 21 16 Gypsum Board Assemblies**  
**09 21 16.23 Gypsum Board Shaft Wall Assemblies**

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**ClarkDietrich™ Building Systems**  
**Design No. CD/WA 120-01**  
**Non-Load Bearing Shaftwall Assembly**  
**ASTM E119 and CAN/ULC S101**  
**Fire Resistance Rating: 2 Hour**  
**Design Weight: 8.5 psf**



STC Rating, As Shown Above: 38  
 STC Rating: As Shown Above with 1-1/2 in. thick 3 pcf mineral fiber insulation in cavity: 44  
 STC Rating: As Shown Above with 1-1/2 in. thick 3 pcf mineral fiber insulation in cavity and with ClarkDietrich 1/2 in. resilient channels, 24 in. oc and at right angles to studs under 1/2 in. or 5/8 in. Gypsum Board Base Layer: 53

- 1. FLOOR, CEILING, CORNER AND INTERSECTION RUNNERS\*:** Tabbed 'J' shaped runner with unequal legs, 2-1/2 in. min. deep, fabricated from min. 0.019 in. thick galvanized steel. Position runners with short leg towards room side of wall. Runners attached to structural members with steel fasteners located not greater than 24 in. on center (oc). Tabbed J-runners have tabs 12 in. oc and are manufactured by ClarkDietrich Building Systems.
- 2. STEEL STUDS\*:** 'C-T' shaped slotted web studs, 1-1/2 in. wide by 2-1/2 in. min. deep, fabricated from min. 0.019 in. thick galvanized steel. Cut to length 1/2 in. less than the opening's height and spaced 24 in. max. oc and between 1 in. thick gypsum shaftliner panels. Studs are manufactured by ClarkDietrich Building Systems.
- 3. GYPSUM SHAFTLINER:** 1 in. thick CertainTeed M2Tech Shaftliner Type X gypsum board (complying with ASTM C1396), or 1 in. thick Continental™ Shaftliner Type X\* drywall, or Mold Defense® Shaftliner

Type X\* drywall, or Weather Defense® Platinum Shaftliner Type X\* drywall (complying with ASTM C1396), or 1 in. thick Georgia-Pacific ToughRock® Shaftliner\* (complying with ASTM C1396 as Type X), or 1 in. thick DensGlass® Shaftliner\* (complying with ASTM C1658 as Type X), or 1 in. thick National Gypsum Gold Bond® Fire Shield® Shaftliner (complying with ASTM C1396), or USG Sheetrock® Gypsum Liner Panel (complying with ASTM C1396 for Type X), supplied in nominal 24 in. widths. The panels are inserted against the long leg of the 'J' runners and into the 1 in. deep recess of the studs. Free edges of end panels are retained by bending tabbed 'J' runner tabs (12 in. oc) at a 90° angle.

- 4. GYPSUM BOARD:** 1/2 in. thick CertainTeed Type C proprietary core gypsum board, or 5/8 in. thick Type X gypsum board (complying with ASTM C1396), or 1/2 in. thick Continental Firecheck® proprietary core Type C drywall, or 5/8 in. thick Firecheck® Type X drywall (complying with ASTM C1396), or 1/2 in. thick Georgia-Pacific ToughRock®

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#### 09 21 16 Gypsum Board Assemblies

#### 09 21 16.23 Gypsum Board Shaft Wall Assemblies

Fireguard C® proprietary core gypsum board, or 1/2 in. thick DensArmor Plus Fireguard C® proprietary core gypsum board (complying with ASTM C1658 for Type X), or 5/8 in. thick ToughRock® Fireguard X® gypsum board (complying with ASTM C1396), or 1/2 in. thick National Gypsum Gold Bond® Fire Shield® C proprietary core gypsum board, or 5/8 in. thick Fire Shield® gypsum board (complying with ASTM C1396 for Type X), or 1/2 in. thick USG Sheetrock® Firecode® C proprietary core gypsum board, or 5/8 in. thick Sheetrock® Firecode X gypsum board (complying with ASTM C1396), applied in two layers on the room side. The base layer is applied horizontally with min. 1 in. long drywall screws 24 in. oc, starting 3 in. from the top and bottom. Face layer is applied vertically with min. 1-5/8 in. long screws 12 in. oc, starting 6 in. from the top and bottom.

Face layer gypsum board joints are finished with paper tape and joint compound (complying with ASTM C475). Exposed screw heads are finished with joint compound (complying with ASTM C475).

**Limitations:** Gypsum Shaftliner and Gypsum Board must be by same manufacturer.

\*Component bearing the Warnock Hersey Certification Mark, manufacturing information of these components is proprietary to the listed component's manufacturer.

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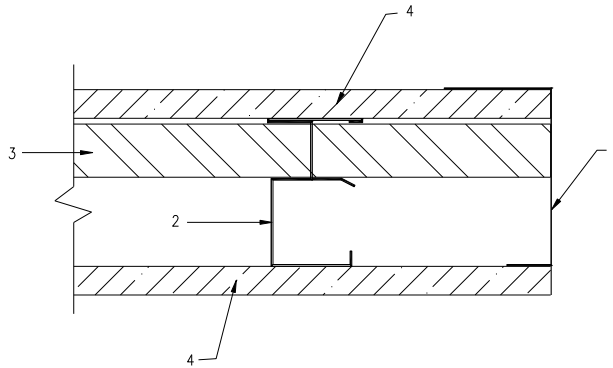
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# CD/WA 120-02

Division 09 – Finishes  
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 09 21 16.23 Gypsum Board Shaft Wall Assemblies

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ClarkDietrich™ Building Systems  
 Design No. CD/WA 120-02  
 Non-Load Bearing Stairwall Assembly  
 ASTM E119 and CAN/ULC S101  
 Fire Resistance Rating: 2 Hour  
 Design Weight: 8.5 psf



STC Rating, As Shown Above: 39  
 STC Rating: As Shown Above with 1-1/2 in. thick 3 pcf mineral fiber insulation in cavity: 43  
 STC Rating: As Shown Above with 1-1/2 in. thick 3 pcf mineral fiber insulation in cavity and with ClarkDietrich 1/2 in. resilient channels, 24 in. oc and at right angles to studs under 1/2 in. or 5/8 in. Gypsum Board Base Layer: 51

1. **FLOOR, CEILING, CORNER AND INTERSECTION RUNNERS\*:** Tabbed 'J' shaped runner with unequal legs, 2-1/2 in. min. deep, fabricated from min. 0.019 in. thick galvanized steel. Position runners with short leg towards cavity side of wall. Runners attached to structural members with steel fasteners located not greater than 24 in. on center (oc). Tabbed 'J' runners have tab at 12 in. oc and are manufactured by ClarkDietrich Building Systems.
2. **STEEL STUDS\*:** 'C-T' shaped slotted web studs, 1-1/2 in. wide by 2-1/2 in. min. deep, fabricated from min. 0.019 in. thick galvanized steel. Cut to length 1/2 in. less than the opening's height and spaced 24 in. max. oc and between 1 in. thick gypsum shaftliner panels. Studs are manufactured by ClarkDietrich Building Systems.
3. **GYPSUM SHAFTLINER:** 1 in. thick CertainTeed M2Tech Shaftliner Type X gypsum board (complying with ASTM C1396), or 1 in. thick Continental™ Shaftliner Type X\*, or Mold Defense® Shaftliner Type

X\* drywall, or 1 in. Weather Defense® Platinum Shaftliner Type X\* drywall (complying with ASTM C1396), or 1 in. thick Georgia-Pacific ToughRock® Shaftliner\* (complying with ASTM C1396 as Type X), or 1 in. thick DensGlass® Shaftliner\* (complying with ASTM C1658 as Type X), or 1 in. thick National Gypsum Gold Bond® Fire Shield® Shaftliner (complying with ASTM C1396), or USG Sheetrock® Gypsum Liner Panel (complying with ASTM C1396 for Type X), supplied in nominal 24 in. widths. The panels are inserted against the long leg of the 'J' runners and into the 1 in. deep recess of the studs. Free edges of end panels are retained by bending tabbed 'J' runner tabs (12 in. oc) at a 90° angle.

4. **GYPSUM BOARD:** 1/2 in. thick CertainTeed Type C proprietary core gypsum board, or 5/8 in. thick Type X gypsum board (complying with ASTM C1396), or 1/2 in. thick Continental Firecheck® proprietary core Type C drywall, or 5/8 in. thick Firecheck® Type X drywall (complying with ASTM C1396), or 1/2 in. thick Georgia-Pacific ToughRock®

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#### 09 21 16 Gypsum Board Assemblies

#### 09 21 16.23 Gypsum Board Shaft Wall Assemblies

Fireguard C® proprietary core gypsum board, or 1/2 in. thick DensArmor Plus Fireguard C® proprietary core gypsum board (complying with ASTM C1658 for Type X), or 5/8 in. thick ToughRock® Fireguard X® gypsum board (complying with ASTM C1396), or 1/2 in. thick National Gypsum Gold Bond® Fire Shield® C proprietary core gypsum board, or 5/8 in. thick Fire Shield® gypsum board (complying with ASTM C1396 for Type X), or 1/2 in. thick USG Sheetrock® Firecode® C proprietary core gypsum board, or 5/8 in. thick Sheetrock® Firecode X gypsum board (complying with ASTM C1396), applied vertically to both sides of the studs with joints offset and attached with min. 1 in. long drywall screws 12 in. oc, starting 6 in. from the top and bottom.

Face layer gypsum board joints are finished with paper tape and joint compound (complying with ASTM C475). Exposed screw heads are finished with joint compound (complying with ASTM C475).

**Limitations:** Gypsum Shaftliner and Gypsum Board must be by the same manufacturer.

\*Component bearing the Warnock Hersey Certification Mark, manufacturing information of these components is proprietary to the listed component's manufacturer.

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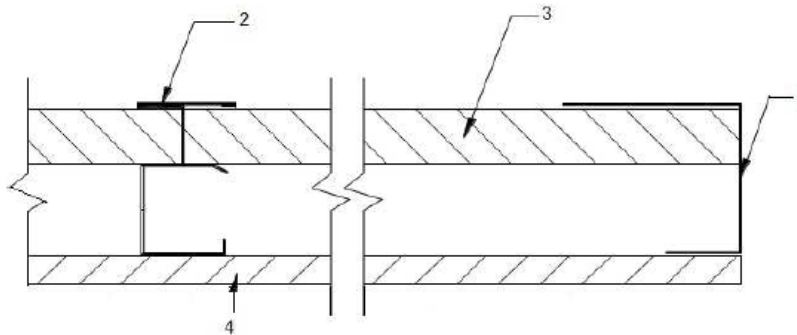


**CD/WA 60-01**

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**09 21 16.23 Gypsum Board Shaft Wall Assemblies**

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**ClarkDietrich™ Building Systems**  
**Design No. CD/WA 60-01**  
**Non-Load Bearing Shaftwall Assembly**  
**ASTM E119 and CAN/ULC S101**  
**Fire Resistance Rating: 1 Hour**  
**Design Weight: 6.5 psf**



STC Rating, As Shown Above: 35

STC Rating: As Shown Above with 1 in. thick 3 pcf mineral fiber insulation in cavity: 39

STC Rating: As Shown Above with 1-1/2 in. thick R5.8 fiberglass insulation in cavity: 43

**1. FLOOR, CEILING, CORNER AND INTERSECTION RUNNERS\*:**

Tabbed 'J' shaped runner with unequal legs, 2-1/2 in. min. deep, fabricated from min. 0.019 in. thick galvanized steel. Position runners with short leg towards room side of wall. Runners attached to structural members with steel fasteners located not greater than 24 in. on center (oc). Tabbed 'J' runners have tabs at 12 in. oc and are manufactured by ClarkDietrich Building Systems.

**2. STEEL STUDS\*:** 'C-T' shaped slotted web studs, 1-1/2 in. wide by 2-1/2 in. min. deep, fabricated from min. 0.019 in. thick galvanized steel. Cut to length 1/2 in. less than the opening's height and spaced 24 in. max. oc and between 1 in. thick gypsum shaftliner panels. Studs are manufactured by ClarkDietrich Building Systems.

**3. GYPSUM SHAFTLINER:** 1 in. thick CertainTeed M2Tech Shaftliner Type X (complying with ASTM C1396), or 1 in. thick Continental™ Shaftliner Type X\* drywall (complying with ASTM C1396), or 1 in. thick Continental Mold Defense® Shaftliner Type X\* drywall (complying with ASTM C1396), or

1 in. thick Continental Weather Defense® Platinum Shaftliner Type X\* drywall (complying with ASTM C1396), or 1 in. thick Georgia-Pacific Gypsum Shaft Liner Type X\* (complying with ASTM C1396), or 1 in. thick Georgia-Pacific Gypsum DensGlass® Ultra Shaft Liner Type X\* (complying with ASTM C1396), or 1 in. thick National Gypsum Gold Bond Shaftliner (complying with ASTM C1396), or 1 in. thick United States Gypsum Shaft Wall Liner (complying with ASTM C1396), supplied in nominal 24 in. widths. The panels are inserted against the long leg of the 'J' runners and into the 1 in. deep recess of the studs. Free edges of end panels are retained by bending tabbed 'J' runner tabs (12 in. oc) at a 90° angle.

**4. GYPSUM BOARD:** 5/8 in. thick CertainTeed Type X gypsum board (complying with ASTM C1396), or 5/8 in. thick Continental Firecheck Type X gypsum board (complying with ASTM C1396), or 5/8 in. thick Georgia-Pacific Gypsum Toughrock Fireguard X gypsum board (complying with ASTM C1396), or 5/8 in. thick National Gypsum Gold Bond Fire-Shield gypsum board (complying with ASTM C1396), or 5/8 in. thick USG Sheetrock

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Firecode X gypsum board (complying with ASTM C1396), applied parallel to the studs on the room side with min. 1 in. long Type S drywall screws 12 in. oc. Gypsum board joints are finished with paper tape and joint compound (complying with ASTM C475). Exposed screw heads are finished with joint compound (complying with ASTM C475).

**Limitations:** Gypsum Shaftliner and Gypsum Board must be by same manufacturer.

\*Component bearing the Warnock Hersey Certification Mark, manufacturing information of these components is proprietary to the listed component's manufacturer.

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