IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.

IT IS FURTHER THE RESPONSIBILITY OF THE USER TO RESEARCH AND UNDERSTAND SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.

QUAD-LOCK ULTRA PANEL
4'-0" [1219mm] LONG x 3.125" [79mm] THICK

REBAR OVERLAP AS SPECIFIED

QUAD-LOCK INSIDE CORNER BRACKET
QUAD-LOCK OUTSIDE CORNER BRACKET

QUAD-LOCK PLASTIC TIE (GREEN SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS

EXTERIOR WALL FINISH AS SPECIFIED
HORIZONTAL WALL REINFORCEMENT AS SPECIFIED
VERTICAL WALL REINFORCEMENT AS SPECIFIED
2" [12.5mm] GYPSUM WALLBOARD
FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES

QUAD-LOCK 90° CORNER DETAIL

8" [203mm] SEE TABLE
3" [79mm]
3½" [79mm]
8" [203mm] SEE TABLE

QUAD-LOCK R-28 [U-0.21] WALL

TIE NAME | CONCRETE CORE THICKNESS
---|---
BLUE TIE | 4" [102mm]
YELLOW TIE | 6" [152mm]
GREEN TIE | 8" [203mm]
RED TIE | 10" [254mm]
BROWN TIE | 12" [305mm]
BLACK TIE + XT | 14" [356mm]
ETC.

QUAD-LOCK ULTRA PANEL
4'-0" [1219mm] LONG x 3.125" [79mm] THICK
**QUAD-LOCK T-WALL DETAIL**

**QUAD-LOCK R-28 [U-0.21] WALL**

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**CONCRETE CORE THICKNESS**

- **BLUE TIE**
- **YELLOW TIE**
- **GREEN TIE**
- **RED TIE**
- **BROWN TIE**
- **BLACK TIE + XT**

---

**4" [102mm]**

**6" [152mm]**

**8" [203mm]**

**10" [254mm]**

**12" [305mm]**

**14" [356mm]**

---

**3.125" [79mm]**

**3" [76mm]**

**3 1/8" [79mm]**

---

**QUAD-LOCK ULTRA PANEL**

**QUAD-LOCK PLASTIC TIE (GREEN SHOWN)**

**QUAD-LOCK PLASTIC TIE (YELLOW SHOWN)**

**QUAD-LOCK TIE FLANGES**

**QUAD-LOCK R-28 [U-0.21] WALL**

**6" [152mm]**

**SEE TABLE**

---

**CORNER DOWELS - ALTERNATE LEFT TO RIGHT OR AS SPECIFIED**

**OVERLAP AS SPECIFIED**

---

**EXTERIOR WALL Finish AS SPECIFIED**

---

**HORIZONTAL WALL REINFORCEMENT AS SPECIFIED**

---

**VERTICAL WALL REINFORCEMENT AS SPECIFIED**

---

**2 x QUAD-LOCK OUTSIDE CORNER BRACKET**

**2 x QUAD-LOCK INSIDE CORNER BRACKET**

---

**2 x QUAD-LOCK OUTSIDE CORNER BRACKET**

**2 x QUAD-LOCK INSIDE CORNER BRACKET**

---

**3" [12.5mm] GYPSUM WALLBOARD**

**FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES**

---

**NOT TO SCALE**

---

**8.5" x 11" [216mm x 279mm]**

---

**2018-06-01**

---

**Z. PROSTRAN**

---

**G. KUSTERMANN**

---

**Quad-Lock Building Systems**

7398 - 132nd Street

Surrey, BC V3W 4M7

Canada

888.711.5625 - Toll Free

604.590.3111

604.590.8412 - fax

www.quadlock.com

---

**IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.**

---

**IT IS FURTHER THE RESPONSIBILITY OF THE USER TO RESEARCH AND UNDERSTAND SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.**
It is the responsibility of the user to comply with all applicable regulations and building code requirements concerning the use of these products.

It is further the responsibility of the user to research and understand safe methods of use and handling of these products.

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2018-06-01
N/A
8.5" x 11" [216mm x 279mm]

Z. Prostran

Quad-Lock Adjustable Angle Bracket
Reinforcement Dowels as Specified

Quad-Lock Ultra Panel
3.125" [79mm] Thick EPS

Quad-Lock Plastic Tie (Green Shown)
Spaced at 12" [305mm] O/C Ver & Hor

2" [12.5mm] Gypsum Wallboard
Fasten with screws into Quad-Lock Tie Flanges

Vertical Wall Reinforcement as Specified

Horizontal Wall Reinforcement as Specified

Exterior Wall Finish as Specified

Quarter-Lock R-28 [U-0.21] Wall

Concrete Core Thickness

Tie Name

8" [203mm]
10" [254mm]
12" [305mm]
14" [356mm]
Black Tie XT
Etc.
IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.

IT IS FURTHER THE RESPONSIBILITY OF THE USER TO RESEARCH AND UNDERSTAND SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.

EXTERIOR WALL FINISH AS SPECIFIED

6" [12.5mm] GYPSUM WALLBOARD
FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES

QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS

HORIZONTAL WALL REINFORCEMENT AS SPECIFIED

VERTICAL WALL REINFORCEMENT AS SPECIFIED

2 x QUAD-LOCK OUTSIDE CORNER BRACKET

2 x QUAD-LOCK INSIDE CORNER BRACKET

PILASTER REINFORCEMENT AS SPECIFIED

2 x QUAD-LOCK ENDCAP BRACKET

QUAD-LOCK TIE (YELLOW SHOWN)
QUAD-LOCK TIE (BROWN SHOWN)
QUAD-LOCK EXTENDER TIE
QUAD-LOCK PLASTIC TIE (GREEN SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

QUAD-LOCK FORMED PILASTER DETAIL

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ETC.

QUAD-LOCK R-28 [U-0.21] WALL

CONCRETE CORE THICKNESS
SEE TABLE

QUAD-LOCK R-28 [U-0.21] WALL

2 x QUAD-LOCK INSIDE CORNER BRACKET

2 x QUAD-LOCK OUTSIDE CORNER BRACKET

2 x QUAD-LOCK ENDCAP BRACKET

VERTICAL WALL REINFORCEMENT AS SPECIFIED

HORIZONTAL WALL REINFORCEMENT AS SPECIFIED

QUAD-LOCK TIE (YELLOW SHOWN)
QUAD-LOCK TIE (BROWN SHOWN)
QUAD-LOCK EXTENDER TIE
QUAD-LOCK PLASTIC TIE (GREEN SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

QUAD-LOCK FORMED PILASTER DETAIL

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CONVENTIONALLY FORMED

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**OPTION A**

Quad-Lock Plastic Tie (Yellow Shown) Spaced at 12" [305mm] O/C Ver & Hor

Exterior Wall Finish as Specified

Reinforced Concrete Core

Vertical and Horizontal Wall Reinforcement as Specified

2" [12.5mm] Gypsum Wallboard Fasten with Screws into Quad-Lock Tie Flanges

Pilaster Reinforcement as Specified

Quad-Lock Ultra Panel 3.125" [79mm] Thick EPS

**OPTION B**

Quad-Lock Plastic Tie (Yellow Shown) Spaced at 12" [305mm] O/C Ver & Hor

Exterior Wall Finish as Specified

Reinforced Concrete Core

Vertical and Horizontal Wall Reinforcement as Specified

2" [12.5mm] Gypsum Wallboard Fasten with Screws into Quad-Lock Tie Flanges

Pilaster Reinforcement as Specified

Quad-Lock Ultra Panel 3.125" [79mm] Thick EPS

**OPTION C**

Quad-Lock Plastic Tie (Yellow Shown) Spaced at 12" [305mm] O/C Ver & Hor

Exterior Wall Finish as Specified

Reinforced Concrete Core

Vertical and Horizontal Wall Reinforcement as Specified

2" [12.5mm] Gypsum Wallboard Fasten with Screws into Quad-Lock Tie Flanges

Pilaster Reinforcement as Specified

Quad-Lock Ultra Panel 3.125" [79mm] Thick EPS

Quad-LOCK PILASTER DETAILS

CONVENTIONALLY FORMED

Quad-Lock Building Systems 7398 - 132nd Street Surrey, BC V2W 4M7 Canada

888 711-5625 - Toll Free 604.590.3111 604.590.8412 - fax www.quadlock.com

2018-06-01

NOT TO SCALE

8.5" x 11" [216mm x 279mm]

2018-06-04

Z. PROSTRAN

G. KUSTERMANN

N/A

QUAD-LOCK R-28 [U-0.21] WALL

2018-06-04

G. KUSTERMANN

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**QUAD-LOCK R-28 [U-0.21] WALL**

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NOT TO SCALE

- **BRICK FINISH AS SPECIFIED**
- **BRICK TIES**
  - SIZE AND SPACING AS SPECIFIED
- **VERTICAL AND HORIZONTAL WALL REINFORCEMENT**
- **QUAD-LOCK ULTRA PANEL**
  - 3.125" [79mm] THICK EPS
- **QUAD-LOCK PLASTIC TIE (YELLOW SHOWN)**
  - SPACED AT 12" [305mm] O/C VER & HOR
- **QUAD-LOCK EXTENDER TIE**
  - SPACED AT 12" [305mm] O/C VER & HOR
- 1/2" [12.5mm] GYPSUM WALLBOARD
  - FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES
- **REINFORCED CONCRETE CORE**

**QUAD-LOCK WIDE WALL DETAIL**

**QUAD-LOCK BUILDING SYSTEMS**

7398 - 132nd Street
Surrey, BC V3W 4M7
Canada

888.711.5625 - Toll Free
604.530.3111
604.590.8412 - fax
www.quadlock.com

QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS
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**QUAD-LOCK R-28 [U-0.21] WALL**

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**QUAD-LOCK 4-WAY INTERSECTION DETAIL**

- Exterior Wall Finish as specified
- 2 x Quad-Lock Straight Bracket
- 4 x Quad-Lock Inside Corner Bracket
- 2 x Quad-Lock End Cap Bracket
- Quad-Lock Plastic Tie (Yellow Shown) spaced at 12" [305mm] O/C Ver & Hor
- Quad-Lock Plastic Tie (Green Shown) spaced at 12" [305mm] O/C Ver & Hor
- Quad-Lock Ultra Panel 3.125" [79mm] Thick EPS
- 1/8" [12.5mm] Gypsum Wallboard fastened with screws into Quad-Lock Tie Flanges
- Vertical Wall Reinforcement as specified
- Horizontal Wall Reinforcement as specified
- Concrete Core Thickness

---

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2018-06-04
Z. Prostran
G. Kustermann

---

NOT TO SCALE

8.5" x 11" [216mm x 279mm]
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REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF
THESE PRODUCTS.

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SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.

**QUAD-LOCK R-28 [U-0.21] WALL**

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**QUAD-LOCK WALL HORIZONTAL TRANSITION**

12" [305mm] TO 6" [152mm] CONCRETE

QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS

HORIZONTAL WALL REINFORCEMENT AS SPECIFIED

VERTICAL WALL REINFORCEMENT AS SPECIFIED

QUAD-LOCK PLASTIC TIE (BROWN SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

TEMPORARY STRONGBACK
FASTEN TO QUAD-LOCK TIE FLANGES AT EVERY ROW

SECURE TEMPORARY LUMBER
TO QUAD-LOCK TIE FLANGES AT EVERY ROW

QUAD-LOCK PLASTIC TIE (YELLOW SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

DRAWN BY: G. KUSTERMANN
DATE DRAWN: 2018-06-04
REVISION NO: N/A
SCALE: 8.5" x 11" [216mm x 279mm]
SHEET SIZE: NOT TO SCALE
APPROVED BY: Z. PROSTRAN
APPROVED ON: 2018-06-04
DRAWING NO: QLU-708

**QUAD-LOCK WALL HORIZONTAL TRANSITION**

6" [152mm]
SEE TABLE

1'-0" [305mm]
SEE TABLE

5 7/8" [79mm]
IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.

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QUAD-LOCK TIES CUT LONGITUDINALLY TO FIT

SECURE ALL VERTICAL AND HORIZONTAL JOINTS BETWEEN PANELS WITH LOW EXPANSION SPRAYFOAM

QUAD-LOCK ULTRA PANELS SCORED ON COMPRESSIVE SIDE SEE QUAD-LOCK INSTALLATION MANUAL

MINIMUM RADIUS ALLOWED = 4'-0" [1.2m]

QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS

EXTERIOR WALL FINISH AS SPECIFIED

3" [79mm] SEE TABLE
8" [203mm] SEE TABLE
3" [79mm]

2" [12.5mm] GYPSUM WALLBOARD OR AS SPECIFIED FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES

HORIZONTAL WALL REINFORCEMENT AS SPECIFIED

VERTICAL WALL REINFORCEMENT AS SPECIFIED

QUAD-LOCK PLASTIC TIE (GREEN SHOWN) SPACED AT 12" [305mm] O/C VER & HOR

QUAD-LOCK R-28 [U-0.21] WALL

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ETC.

QUAD-LOCK TIES CUT LONGITUDINALLY TO FIT

SECURE ALL VERTICAL AND HORIZONTAL JOINTS BETWEEN PANELS WITH LOW EXPANSION SPRAYFOAM

QUAD-LOCK ULTRA PANELS SCORED ON COMPRESSIVE SIDE SEE QUAD-LOCK INSTALLATION MANUAL

MINIMUM RADIUS ALLOWED = 4'-0" [1.2m]

QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS

EXTERIOR WALL FINISH AS SPECIFIED

3" [79mm] SEE TABLE
8" [203mm] SEE TABLE
3" [79mm]

2" [12.5mm] GYPSUM WALLBOARD OR AS SPECIFIED FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES

HORIZONTAL WALL REINFORCEMENT AS SPECIFIED

VERTICAL WALL REINFORCEMENT AS SPECIFIED

QUAD-LOCK PLASTIC TIE (GREEN SHOWN) SPACED AT 12" [305mm] O/C VER & HOR

QUAD-LOCK R-28 [U-0.21] WALL

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IT IS FURTHER THE RESPONSIBILITY OF THE USER TO RESEARCH AND UNDERSTAND SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.

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**QUAD-LOCK WALL CAP DETAIL**

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QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS

QUAD-LOCK PLASTIC TIE (GREEN SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

HORIZONTAL WALL REINFORCEMENT AS SPECIFIED

VERTICAL WALL REINFORCEMENT AS SPECIFIED

CHAMFER/BEVEL ALL EXPOSED EDGES

WALL FINISH AS SPECIFIED

REINFORCED CONCRETE CORE

CAP REINFORCEMENT AS SPECIFIED

HORIZONTAL WALL REINFORCEMENT AS SPECIFIED

VERTICAL WALL REINFORCEMENT AS SPECIFIED

8" [203mm] SEE TABLE

5/8" [79mm]

1/2" [203mm]
It is the responsibility of the user to comply with all applicable regulations and building code requirements concerning the use of these products. It is further the responsibility of the user to research and understand safe methods of use and handling of these products.

Quad-Lock Building Systems
7388 - 132nd Street
Surrey, BC V3W 4M7
Canada

888.711.5625 - Toll Free
604.590.8412 - fax
www.quadlock.com

Stud Wall Attachment Details

Option A
- Exterior wall finish as specified
- Quad-Lock Ultra Panel 3.125" [79mm] thick EPS
- Vertical wall reinforcement as specified
- Horizontal wall reinforcement as specified
- Quad-Lock plastic tie (green shown) spaced at 12" [305mm] O/C ver & hor
- Masonry screw or anchor as specified
- Remove foam and fasten directly to concrete with masonry screw or anchor as specified
- Glue Stud to Quad-Lock panels with water-based glue and screw to Quad-Lock plastic tie flanges

Option B
- Reinforced concrete core

Option C
- Interior partition wall

Table:

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Quad-Lock R-28 [U-0.21] Wall

8" [203mm] see table

3½" [79mm]

2½ [12.5mm] gypsum wallboard fasten with screws into Quad-Lock tie flanges

NOT TO SCALE

2018-06-04

G. Kustermann

2018-06-04

N/A

YY-YYYY-MM-DD

Z. Prostran

QLU-711

NOT TO SCALE

8.5" x 11" [216mm x 279mm]
IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.

IT IS FURTHER THE RESPONSIBILITY OF THE USER TO RESEARCH AND UNDERSTAND SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.

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QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS

REINFORCED CONCRETE CORE

SLEEVE WITH WATERSTOP
(SECURE TO QUAD-LOCK PANELS PRIOR TO POUR WITH SPRAYFOAM)

QUAD-LOCK PLASTIC TIE (GREEN SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

BENTONITE ROD

STIFF MIX CRYSTALLINE BASED WATERPROOFING (E.G. XYPEX)

LIQUID WATERPROOFING SEAL
(MIN. 2" [12mm] WIDE x 2" [12mm] TALL)

WATER PROOFING PEEL&STICK MEMBRANE OR AS SPECIFIED

STIFF MIX CRYSTALLINE BASED WATERPROOFING (E.G. XYPEX)

BACKER RODS

QUAD-LOCK PLASTIC TIE (GREEN SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

PRODUCT NO: QLU-712
IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE
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QUAD-LOCK WALL DRYER VENT PENETRATION

- REINFORCED CONCRETE CORE
- PVC SLEEVE - TO FORM OFF THE OPENING PRIOR TO POUR SECURE WITH SPRAYFOAM TO QUAD-LOCK PANELS
- BACKER ROD AND CAULKING
- DRYER VENT PIPE AS REQUIRED
- SPRAYFOAM FOR SLEEVE

FINISH CAP - FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES

8" [203mm] SEE TABLE
IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.

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**Quad-Lock Large Plumbing Detail**

**Quad-Lock R-28 [U-0.21] Wall**

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**Exterior Wall Finish** as specified

**Quad-Lock Ultra Panel** - 3.125" [79mm] Thick EPS

**Quad-Lock Plastic Tie** (Green shown) Spaced at 12" [305mm] O/C Ver & Hor

**Horizontal & Vertical Wall Reinforcement** as specified

---

**Step 1**

Secure half a PVC pipe to Quad-Lock wall prior to pour

**Step 2**

Remove Wall EPS and secure plumbing element with low expansion spray foam. Once dry, rasp down flush with surface of Quad-Lock panels.

1/2" [12.5mm] Gypsum Wallboard fasten with screws into Quad-Lock tie flanges.
IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.

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**QUAD-LOCK WALL TO EXISTING CONCRETE WALL**

**QUAD-LOCK R-28 [U-0.21] WALL**

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**CONCRETE CORE THICKNESS**

- 4" [102mm]
- 6" [152mm]
- 8" [203mm]
- 10" [254mm]
- 12" [305mm]
- 14" [356mm]

**TIE NAME**

- BLUE TIE
- YELLOW TIE
- GREEN TIE
- RED TIE
- BROWN TIE
- BLACK TIE + XT

**QUAD-LOCK PLASTIC TIE (YELLOW SHOWN)**

SPACED AT 12" [305mm] O/C VER & HOR

**QUAD-LOCK ULTRA PANEL**

3.125" [79mm] THICK EPS

**HORIZONTAL WALL REINFORCEMENT AS SPECIFIED**

**VERTICAL WALL REINFORCEMENT AS SPECIFIED**

**REINFORCED CONCRETE CORE**

**QUAD-LOCK R-28 WALL**

**HORIZONTAL WALL REINFORCEMENT AS SPECIFIED**

**VERTICAL FURRING FOR FINISH ATTACHMENT FASTEN INTO CONCRETE BLOCK**

**2' [12.5mm] GYPSUM WALLBOARD FASTEN WITH SCREWS INTO FURRING**

**3' [12.5mm] GYPSUM WALLBOARD FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES**

**EXISTING CONCRETE WALL**

**EXTERIOR WALL INSULATION SPECIFIED**

**BASE COAT STUCCO**

**EXTERIOR WALL FINISH - STUCCO OR AS SPECIFIED (EIFS)**

**BACKER ROD AND CAULKING**

**JOINT WIDTH AS SPECIFIED**

**VERTICAL FURRING FOR FINISH ATTACHMENT FASTEN INTO CONCRETE BLOCK**

**2' [12.5mm] GYPSUM WALLBOARD FASTEN WITH SCREWS INTO FURRING**

**3' [12.5mm] GYPSUM WALLBOARD FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES**

**PROVIDE REBAR DOWELS BETWEEN WALLS TO MATCH HORIZONTAL REBAR DRILL TO CONCRETE & SECURE W/ EPOXY GROUT LENGTH OF DOWEL SUFFICIENT TO DEVELOP PROPER SPLICE**

**QUAD-LOCK ULTRA PANEL**

3.125" [79mm] THICK EPS

**HORIZONTAL WALL REINFORCEMENT AS SPECIFIED**

**VERTICAL WALL REINFORCEMENT AS SPECIFIED**

**REINFORCED CONCRETE CORE**

**QUAD-LOCK PLASTIC TIE (YELLOW SHOWN)**

SPACED AT 12" [305mm] O/C VER & HOR

**QUAD-LOCK R-28 WALL**

**HORIZONTAL WALL REINFORCEMENT AS SPECIFIED**

**VERTICAL FURRING FOR FINISH ATTACHMENT FASTEN INTO CONCRETE BLOCK**

**2' [12.5mm] GYPSUM WALLBOARD FASTEN WITH SCREWS INTO FURRING**

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**EXISTING CONCRETE WALL**

**EXTERIOR WALL INSULATION SPECIFIED**

**BASE COAT STUCCO**

**EXTERIOR WALL FINISH - STUCCO OR AS SPECIFIED (EIFS)**

**BACKER ROD AND CAULKING**

**JOINT WIDTH AS SPECIFIED**

**VERTICAL FURRING FOR FINISH ATTACHMENT FASTEN INTO CONCRETE BLOCK**

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Quad-Lock R-28 [U-0.21] Wall

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Not to Scale

Quad-Lock Wall to Concrete Block Wall

CMU Cores Filled

Existing Concrete Block (CMU) Wall Core Filled

Exterior Wall Insulation Specified

Base Coat Stucco

Exterior Wall Finish - Stucco or As Specified (EIFS)

Joint Width As Specified

Backer Rod and Caulking

Provide Rebar Dowels Between Walls to Match Horizontal Rebar

Drill Block to Core Fill & Secure w/ Epoxy Grout

Length of Dowel Sufficient to Develop Proper Splice

Quad-Lock Ultra Panel

3.125" [79mm] Thick EPS

Horizontal Wall Reinforcement As Specified

Vertical Wall Reinforcement As Specified

Reinforced Concrete Core

Quad-Lock Plastic Tie (Yellow Shown)

Spaced at 12" [305mm] O/C Ver & Hor

2" [12.5mm] Gypsum Wallboard Fasten With Screws Into Furring

2" [12.5mm] Gypsum Wallboard Fasten With Screws Into Quad-Lock Tie Flanges

3/8" [73mm] See Table
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NOT TO SCALE

QUAD-LOCK WALL VERTICAL TRANSITION
2" [51mm] STEP

QUAD-LOCK PLUS PANEL FOR TRANSITION
4.25" [108mm] THICK EPS

QUAD-LOCK ULTRA PANEL
3.125" [79mm] THICK EPS

HORIZONTAL WALL REINFORCEMENT AS SPECIFIED

VERTICAL WALL REINFORCEMENT AS SPECIFIED

REINFORCED CONCRETE CORE

QUAD-LOCK PLASTIC TIE (GREEN SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

QUAD-LOCK PLASTIC TIE (YELLOW SHOWN)
SPACED AT 12" [305mm] O/C VER & HOR

WALL FINISH AS SPECIFIED

QUAD-LOCK R-28 [U-0.21] WALL

8" [203mm]
SEE TABLE

3 1/2" [79mm]

6" [152mm]
SEE TABLE

2" [51mm]

8" [203mm]
SEE TABLE

3 1/2" [79mm]
**QUAD-LOCK R-28 [U-0.21] WALL**

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**QUAD-LOCK WALL VERTICAL TRANSITION**

4" [102mm] STEP

- **QUAD-LOCK ULTRA PANEL**
  - 3.125" [79mm] THICK EPS

- **QUAD-LOCK METAL TRACK**

- **HORIZONTAL WALL REINFORCEMENT AS SPECIFIED**

- **VERTICAL WALL REINFORCEMENT AS SPECIFIED**

- **WALL FINISH AS SPECIFIED**

- **REINFORCED CONCRETE CORE**

- **QUAD-LOCK PLASTIC TIE (YELLOW SHOWN)**
  - SPACED AT 12" [305mm] O/C VER & HOR

- **QUAD-LOCK PLASTIC TIE (RED SHOWN)**
  - SPACED AT 12" [305mm] O/C VER & HOR

- **SPACED AT 10" [254mm]**

- **QUAD-LOCK METAL TRACK**

---

**CONCRETE CORE THICKNESS**

**TIE NAME**

**ETC.**
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TYPICAL QUAD-LOCK R-28 WALL
FRONT (SECTION) VIEW

<table>
<thead>
<tr>
<th>ITEM</th>
<th>NOMINAL DENSITY (pcf)</th>
<th>MATERIAL THICKNESS (in)</th>
<th>R-VALUE PER INCH (h<em>ft²</em>°F/BTU/in)</th>
<th>R-VALUE PER LAYER (h<em>ft²</em>°F/BTU)</th>
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<tbody>
<tr>
<td>EXTERIOR AIR FILM</td>
<td></td>
<td></td>
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<tr>
<td>STUCCO FINISH</td>
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<td>0.78</td>
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<td>QUAD-LOCK ULTRA PANEL EPS Type II in USA</td>
<td>1.5</td>
<td>3.125</td>
<td>4.1 (Interpolated as per ASTM C-578)</td>
<td>12.81</td>
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<td>CONCRETE CORE</td>
<td>150</td>
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<td>0.45</td>
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<tr>
<td>INTERIOR AIR FILM</td>
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</tr>
</tbody>
</table>

TOTAL R-VALUE (h*ft²*°F/BTU) 28.2

NOTES:
ASTM C-578 R-values taken at 75°F for 1.5pcf EPS

QUAD-LOCK BUILDING SYSTEMS
7398 - 132nd Street
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604.590.8412 - fax
www.quadlock.com

QUAD-LOCK R-28 WALL
2018-06-01
N/A
YYYY-MM-DD
2018-06-04
Z. PROSTRAN
G. KUSTERMANN
QLU-720

NOT TO SCALE
8.5" x 11" [216mm x 279mm]
**Quadrant Lock U-0.21 Wall**

**Table:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Material Density (kg/m³)</th>
<th>Thickness (mm)</th>
<th>Design Thermal Conductivity, (\lambda) (W/(m·K))</th>
<th>Design Thermal Resistance, (R) (W/(m·K))</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior Air Film</td>
<td></td>
<td></td>
<td></td>
<td>0.04</td>
<td>Source: ISO 10456</td>
</tr>
<tr>
<td>Exterior Finish</td>
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<td></td>
<td></td>
<td>0.8</td>
<td>Source: ISO 10456</td>
</tr>
<tr>
<td>Quadrant Lock Ultra Panel</td>
<td>24</td>
<td>10</td>
<td>0.0335</td>
<td>2.35821</td>
<td>Source: BASF EPS Data Specifications</td>
</tr>
<tr>
<td>Concrete Core</td>
<td>2400</td>
<td>152.4</td>
<td>2.5</td>
<td>0.06096</td>
<td>Source: ISO 10456</td>
</tr>
<tr>
<td>Quadrant Lock Ultra Panel</td>
<td>24</td>
<td>79.375</td>
<td>0.0335</td>
<td>2.35821</td>
<td>Source: BASF EPS Data Specifications</td>
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<tr>
<td>Drywall</td>
<td>12.5</td>
<td>0.21</td>
<td></td>
<td>0.05952</td>
<td>Source: ISO 10456</td>
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<tr>
<td>Interior Air Film</td>
<td></td>
<td></td>
<td></td>
<td>0.13</td>
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<tr>
<td>Total Design Thermal Resistance, (R_T)</td>
<td></td>
<td></td>
<td></td>
<td>0.68</td>
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</tr>
</tbody>
</table>

**Notes:**

- \(U = 1/R_T\)
- With applied reduction factor of 0.961
- Total Thermal Transmittance, U-Value (W/(m²·K)) 0.207

**Designations:**

- **UBL-0.21 WALL**
- **Drawing No:** QLU-721
- **Date:** 2018-06-04
- **Drawing Size:** 8.5" x 11" [216mm x 279mm]
- **Approved by:** G. Kustermann
- **Quadrant Lock Building Systems**

---

**IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS. IT IS FURTHER THE RESPONSIBILITY OF THE USER TO RESEARCH AND UNDERSTAND SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.**
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12.7mm GYPSUM WALLBOARD (OR AS SPECIFIED)
FASTEN WITH SCREWS INTO QUAD-LOCK TIE FLANGES

QUAD-LOCK ULTRA PANEL - 79mm THICK EPS
REINFORCED CONCRETE CORE
REINFORCEMENT OMITTED FOR CLARITY

QUAD-LOCK ULTRA PANEL - 79mm THICK EPS
EXTERIOR WALL FINISH (WITH VERTICAL FURRING)
HOLLOW BACKED VINYL SIDING OR AS SPECIFIED

EXTERIOR AIR FILM

QUAD-LOCK PLASTIC TIE (YELLOW SHOWN)
SPACED AT 305mm O/C VER & HOR

TYPICAL QUAD-LOCK RSI-4.84 WALL
FRONT (SECTION) VIEW

<table>
<thead>
<tr>
<th>Item</th>
<th>Nominal Density (kg/m²)</th>
<th>Material Thickness (mm)</th>
<th>RSI/mm (K·m²/W)/mm</th>
<th>Effective RSI/Layer (K·m²/W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTERIOR AIR FILM</td>
<td></td>
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<td>0.03</td>
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<tr>
<td>EXTERIOR FINISH Hollow Backed Vinyl Siding</td>
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<td>0.11</td>
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</tr>
<tr>
<td>QUAD-LOCK ULTRA PANEL EPS Type 2 in CAN</td>
<td>24</td>
<td>79.375</td>
<td>0.028</td>
<td>2.2225</td>
</tr>
<tr>
<td>CONCRETE CORE</td>
<td>2400</td>
<td>152.4</td>
<td>0.0004</td>
<td>0.06096</td>
</tr>
<tr>
<td>QUAD-LOCK ULTRA PANEL EPS Type 2 in CAN</td>
<td>24</td>
<td>79.375</td>
<td>0.028</td>
<td>2.2225</td>
</tr>
<tr>
<td>GYPSUM WALLBOARD</td>
<td></td>
<td>12.7</td>
<td>0.0063</td>
<td>0.08001</td>
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<tr>
<td>INTERIOR AIR FILM</td>
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<td></td>
<td>0.12</td>
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<tr>
<td><strong>EFFECTIVE RSI-VALUE (K·m²/W)</strong></td>
<td></td>
<td></td>
<td><strong>4.846</strong></td>
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</tr>
</tbody>
</table>

NOTES:
RSI material values taken from: http://www.nrcan.gc.ca/energy/efficiency/housing/new-homes/energy-star/14176
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USA QUAD-LOCK WALL UL FIRE RESISTANCE RATINGS (FRR)

**2 HOUR UL FIRE RATED WALL**
UL Design No. U934

- Wall Reinforcement (min. as tested)
- #4 horizontal rebar spaced @ 12" o/c
- #4 vertical rebar spaced @ 16" o/c centered in wall

- Quad-Lock Ultra Panel
3.125" Thick EPS

- Quad-Lock Blue Plastic Tie
Spaced at 12" O/C Ver & Hor

- Normal Weight Concrete (min. as tested)
145 ±5 pcf density
2900 psi nominal compressive strength.

Min 2" thick, 1.5 psf min area density, 48 in. wide gypsum wallboard fastened to flanges of Quad-Lock Ties with 2" long drywall screws at 12" o/c ver & hor. Joints covered with joint compound, covered with joint tape, and covered with an additional coat of joint compound. Screwheads covered with joint compound. When the wall is used as an exterior wall, the Fire Resistance Rating is applicable from the inside only. The gypsum wallboard on the exterior face of the exterior wall may be omitted provided the EPS insulation is protected in accordance with building code requirements.

**3 HOUR UL FIRE RATED WALL**
UL Design No. U934

- Wall Reinforcement (min. as tested)
- #4 horizontal rebar spaced @ 12" o/c
- #4 vertical rebar spaced @ 16" o/c centered in wall

- Quad-Lock Ultra Panel
3.125" Thick EPS

- Quad-Lock Yellow Plastic Tie
Spaced at 12" O/C Ver & Hor

- Normal Weight Concrete (min. as tested)
145 ±5 pcf density
2900 psi nominal compressive strength.

Min 2" thick, 1.5 psf min area density, 48 in. wide gypsum wallboard fastened to flanges of Quad-Lock Ties with 2" long drywall screws at 12" o/c ver & hor. Joints covered with joint compound, covered with joint tape, and covered with an additional coat of joint compound. Screwheads covered with joint compound. When the wall is used as an exterior wall, the Fire Resistance Rating is applicable from the inside only. The gypsum wallboard on the exterior face of the exterior wall may be omitted provided the EPS insulation is protected in accordance with building code requirements.

**4 HOUR UL FIRE RATED WALL**
UL Design No. U934

- Wall Reinforcement (min. as tested)
- #4 horizontal rebar spaced @ 12" o/c
- #4 vertical rebar spaced @ 16" o/c centered in wall

- Quad-Lock Ultra Panel
3.125" Thick EPS

- Quad-Lock Red Plastic Tie
Spaced at 12" O/C Ver & Hor

- Normal Weight Concrete (min. as tested)
145 ±5 pcf density
2900 psi nominal compressive strength.

Min 2" thick, 1.5 psf min area density, 48 in. wide gypsum wallboard fastened to flanges of Quad-Lock Ties with 2" long drywall screws at 12" o/c ver & hor. Joints covered with joint compound, covered with joint tape, and covered with an additional coat of joint compound. Screwheads covered with joint compound. When the wall is used as an exterior wall, the Fire Resistance Rating is applicable from the inside only. The gypsum wallboard on the exterior face of the exterior wall may be omitted provided the EPS insulation is protected in accordance with building code requirements.
IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE REGULATIONS AND BUILDING CODE REQUIREMENTS CONCERNING THE USE OF THESE PRODUCTS.

IT IS FURTHER THE RESPONSIBILITY OF THE USER TO RESEARCH AND UNDERSTAND SAFE METHODS OF USE AND HANDLING OF THESE PRODUCTS.

Quad-Lock Ultra Panel
79mm Thick EPS

Quad-Lock Blue Plastic Tie
Spaced at 305mm O/C Ver & Hor

Sand-Limestone Concrete (min. as tested)
2300±50 Kg/m³ density
20 MPa nominal compressive strength.

12.7mm thick, 7.5 Kg/m² min. area density, 1220mm wide gypsum wallboard fastened to flanges of Quad-Lock Ties with 50mm long drywall screws at 305mm o/c ver & hor. Joints covered with joint compound, covered with joint tape, and covered with an additional coat of joint compound. Screwheads covered with joint compound. When the wall is used as an exterior wall, the Fire Resistance Rating is applicable from the inside only. The gypsum wallboard on the exterior face of the exterior wall may be omitted provided the EPS insulation is protected in accordance with building code requirements.

Quad-Lock Blue Plastic Tie
Spaced at 305mm O/C Ver & Hor

Sand-Limestone Concrete (min. as tested)
2300±50 Kg/m³ density
20 MPa nominal compressive strength.

12.7mm thick, 7.5 Kg/m² min. area density, 1220mm wide gypsum wallboard fastened to flanges of Quad-Lock Ties with 50mm long drywall screws at 305mm o/c ver & hor. Joints covered with joint compound, covered with joint tape, and covered with an additional coat of joint compound. Screwheads covered with joint compound. When the wall is used as an exterior wall, the Fire Resistance Rating is applicable from the inside only. The gypsum wallboard on the exterior face of the exterior wall may be omitted provided the EPS insulation is protected in accordance with building code requirements.

Quad-Lock Blue Plastic Tie
Spaced at 305mm O/C Ver & Hor

Sand-Limestone Concrete (min. as tested)
2300±50 Kg/m³ density
20 MPa nominal compressive strength.

12.7mm thick, 7.5 Kg/m² min. area density, 1220mm wide gypsum wallboard fastened to flanges of Quad-Lock Ties with 50mm long drywall screws at 305mm o/c ver & hor. Joints covered with joint compound, covered with joint tape, and covered with an additional coat of joint compound. Screwheads covered with joint compound. When the wall is used as an exterior wall, the Fire Resistance Rating is applicable from the inside only. The gypsum wallboard on the exterior face of the exterior wall may be omitted provided the EPS insulation is protected in accordance with building code requirements.

Quad-Lock Ultra Panel
79mm Thick EPS

Quad-Lock Blue Plastic Tie
Spaced at 305mm O/C Ver & Hor

Sand-Limestone Concrete (min. as tested)
2300±50 Kg/m³ density
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12.7mm thick, 7.5 Kg/m² min. area density, 1220mm wide gypsum wallboard fastened to flanges of Quad-Lock Ties with 50mm long drywall screws at 305mm o/c ver & hor. Joints covered with joint compound, covered with joint tape, and covered with an additional coat of joint compound. Screwheads covered with joint compound. When the wall is used as an exterior wall, the Fire Resistance Rating is applicable from the inside only. The gypsum wallboard on the exterior face of the exterior wall may be omitted provided the EPS insulation is protected in accordance with building code requirements.
QUAD-LOCK WALL TYPICAL METAL BRACING DETAIL

<table>
<thead>
<tr>
<th>TIE NAME</th>
<th>CONCRETE CORE THICKNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLUE TIE</td>
<td>4&quot; [102mm]</td>
</tr>
<tr>
<td>YELLOW TIE</td>
<td>6&quot; [152mm]</td>
</tr>
<tr>
<td>GREEN TIE</td>
<td>8&quot; [203mm]</td>
</tr>
<tr>
<td>RED TIE</td>
<td>10&quot; [254mm]</td>
</tr>
<tr>
<td>BROWN TIE</td>
<td>12&quot; [305mm]</td>
</tr>
<tr>
<td>BLACK TIE + XT</td>
<td>14&quot; [356mm]</td>
</tr>
</tbody>
</table>

ADJUSTABLE DIAGONAL LEG SECURE TO GROUND

QUAD-LOCK ULTRA PANEL 3.125" [79mm] THICK EPS

CONCRETE CAVITY - SEE TABLE ABOVE

HORIZONTAL & VERTICAL WALL REINFORCEMENT OMITTED FOR CLARITY

QUAD-LOCK METAL TRACK AND WIRE TOP TIES FOR TOP OF WALL FINISH

SPACE BRACES AT 4'-0" TO 6'-0" [1.2m - 1.8m] O/C

BRACING CHANNEL SPACED AT 4'-0" TO 6'-0" [1.2m TO 1.8m] O/C FASTEN TO QUAD-LOCK TIE FLANGES AT 12" [305mm] O/C VERTICALLY AND TO METAL TRACK AT TOP

QUAD-LOCK PLASTIC TIE (GREEN SHOWN) SPACED @ 12" [305mm] O/C VER & HOR

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**QUAD-LOCK WALL TYPICAL WOOD BRACING DETAIL**

**TIE NAME**

<table>
<thead>
<tr>
<th>TIE NAME</th>
<th>CONCRETE CORE THICKNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLUE TIE</td>
<td>4&quot; [102mm]</td>
</tr>
<tr>
<td>YELLOW TIE</td>
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<tr>
<td>RED TIE</td>
<td>10&quot; [254mm]</td>
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<td>BROWN TIE</td>
<td>12&quot; [305mm]</td>
</tr>
<tr>
<td>BLACK TIE + XT</td>
<td>14&quot; [356mm]</td>
</tr>
</tbody>
</table>

**QUAD-LOCK R-28 [U-0.21] WALL**

**SPACE BRACES AT**

4'-0" TO 6'-0" [1.2m - 1.8m] O/C

**QUAD-LOCK METAL TRACK AND WIRE TOP TIES FOR TOP OF WALL FINISH**

**WOOD STRONGBACK**

SPACED AT 4'-0" TO 6'-0" [1.2m TO 1.8m] O/C

FASTEN TO QUAD-LOCK TIE FLANGES AT 12" [305mm] O/C VERTICALLY

AND TO METAL TRACK AT TOP

**QUAD-LOCK ULTRA PANEL**

3.125" [79mm] THICK EPS

**CONCRETE CAVITY - SEE TABLE ABOVE**

**QUAD-LOCK PLASTIC TIE**

(GREEN SHOWN)

SPACED @ 12" [305mm] O/C

VER & HOR

**HORIZONTAL & VERTICAL WALL REINFORCEMENT OMITTED FOR CLARITY**

**ADJUSTABLE TURNBUCKLE SECURE TO GROUND**