

RULON LINEAR OPEN SUSPENDED WOOD CEILING SYSTEMS
ARCHITECTURAL SPECIFICATIONS

PART 1 - GENERAL

- A. The natural wood ceiling systems covered by this specification shall be the products of the Rulon International, World Commerce Center, 2000 Ring Way Road, St. Augustine, FL 32092. Phone: 800-227-8566, Fax: 904-584-1499.
- B. The General Conditions and the requirements of Division 1 of the specifications shall apply to all work hereunder.
- C. All work shall be completed in accordance with the manufacturer's instructions, and in a manner satisfactory to the owner's representative.

1.01 SCOPE

Rulon International shall furnish a suspension cliprail system with attached clips, and Linear Wood Strips. Designated accessories necessary to complete installation furnished by the contractor - in compliance with plans and specifications.

1.02 RELATED WORK NOT INCLUDED UNDER THIS SECTION

Suspension systems and components for ceilings, other than manufacturer's Linear Suspended Wood Ceiling System, are not included.

1.03 QUALITY ASSURANCE

- A. **Installer Qualifications:** The installer must be a firm with a minimum of two (2) years of successful experience in installation of suspended wood ceilings of similar requirements to this project. The installer must be acceptable to the architect, manufacturer, and owner's representative.
- B. **Fire Performance Characteristics:** When specified as "Fire Resistant", wood ceiling boards shall conform to Class 1, or A flame spread rating, when tested according to ASTM E-84.
- C. **Environmental Standards:** When required the wood ceiling shall originate from well managed forests as certified by accredited and recognized industry certifying organizations.

1.04 PROJECT CONDITIONS

Installation shall be done only when the temperature and humidity closely approximate the interior conditions that will exist when the building is occupied. The heating and cooling systems shall be operating before, during, and after installation, with the humidity of the interior spaces maintained between 25% and 55%.

It is important that plenums have proper ventilation, especially in high moisture areas. There shall be no excessive build up of heat in the ceiling areas.

Prior to the start of installation, all exterior windows and doors are to be in place, glazed, and weather-stripped. The roof is to be watertight, and all wet trades' work is to be completed, and thoroughly dry.

Mechanical, electrical, and other utility service installations above the ceiling plane shall have been completed. No materials should rest against, or wrap around, the ceiling suspension components or connecting hangers.

1.05 COORDINATION OF WORK

Layout and installation of the Linear Ceiling and its suspension system shall be coordinated with other work penetrating through the ceiling. This includes light fixtures, HVAC equipment, and fire suppression system components.

1.06 SUBMITTALS

- A. Product Data: Rulon International shall provide product specifications and installation instructions for all supplied ceiling materials.
- B. Shop Drawings: When required, Rulon International shall supply shop drawings showing the placement of hangers, the location of cliprails, and other details deemed pertinent to proper installation.
- C. Samples: A 9" wide x 12" long wood sample shall be submitted for approval. The sample shall be made of the wood specie selected, with the selected finish applied; and installed on cliprails.

1.07 DELIVERY, STORAGE, and HANDLING

- A. All materials shall be delivered to the project site in the original, labeled, unopened packages.
- B. Materials shall be stored flat and level in a fully enclosed space. For a minimum of seventy-two (72) hours immediately prior to ceiling installation, the Linear Wood Strips shall be stored in the room in which they will be installed. The temperature and humidity of the room shall closely approximate those conditions that will exist when the building is occupied. Linear Wood Strips shall be stored off the floor.

- C. Care in handling must be exercised to avoid damage.

1.08 WARRANTIES

- A. **Manufacturer:** All materials supplied by the ceiling manufacturer shall be guaranteed against manufacturing defects for one (1) year. Because of differing site conditions, wood stains and colorings can vary with age, and are excluded from this warranty.
- B. **Contractor:** All work shall be guaranteed for one (1) year from final acceptance of completed work.

PART 2 - PRODUCTS

2.01 WOOD STRIPS

Linear Wood Strips shall be manufactured by Rulon International, St. Augustine, Florida, PH-1-800-227-8566. Linear Wood Strips shall be made from prime grade, all-natural [specie] with a [selected] finish. They shall be manufactured in random lengths with tongue-and-groove ends, or in nominal fixed lengths depending on area dimensions.

- A. **Interior Areas:** For interior ceiling areas, the Linear, Open Style shall be a 4-1/2" module, having wood strips 3/4" thick x 3-3/4" wide, and having a 3/4" reveal with a factory-installed fiberfelt spacer between the wood strips. The Open Style fiberfelt spacer is provided in a standard black color.
- B. **Exterior Areas:** For exterior ceiling areas, the Linear, Open Style shall be a 4-1/2" module, having wood strips 3/4" thick x 3-3/4" wide, and having a 3/4" reveal. Loose hardboard (ABS) spacers shall be provided by Rulon which are to be placed between the wood strips during installation. The hardboard spacer is provided in a standard black color.

Wood is a natural product that will undergo changes with variations in the environment. Therefore, all dimension tolerances are $\pm 1/8"$.

2.02 SUSPENSION SYSTEMS

The suspension system shall consist of Rulon's cliprails, installed on #12-gauge wire hangers.

2.03 EDGES, BORDERS, and PERIMETER TRIMS

Edges, borders, and perimeter trims shall be designated by specifier in accordance with standard design details available. All wood ceiling products specified shall be supplied by the ceiling manufacturer.

2.04 FINISHES and COLORS

All Linear Wood Strips shall be factory-finished with clear sealers, wood stains, or semi-transparent color treatments as selected. All finishes shall be selected by the designer, architect, or designated owner's representative.

Wood is a natural product with variations in grain, texture, and color - often ranging from light to dark - thereby, affecting the surface look. Product finishes are stain or sealer coats, spray-applied to a smooth-sanded surface.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Ceiling Layout: The contractor shall measure ceiling areas and establish the layout of the hangers and cliprails, in accordance with installation instructions.
- B. Coordination: The contractor shall furnish the layout for supports that shall be installed for suspension of ceilings. He shall furnish concrete inserts, steel deck hanger clips, or similar devices for installation, in time to coordinate the work.

3.02 INSTALLATION

- A. General: The contractor shall install materials in accordance with Rulon International printed instructions. The contractor will comply with applicable regulations and industry standards.
- B. Perimeters: Using a leveling device, the contractor shall lay out and install perimeter trim, as specified.
- C. Suspensions: The contractor shall install suspension systems to comply with appropriate industry standards. The contractor shall locate cliprails perpendicular to wood direction, 4" from one wall for the first cliprail, continuing 24" maximum, on center, ending within 4" of the opposite wall.

#12-Gauge Wire hangers shall be installed 4' on center, along each cliprail. The wire hangers shall be attached to inserts, screw eyes, or other connecting devices that are secure and appropriate for suspending the ceiling and that will not deteriorate or fail with age or elevated temperatures.

- D. Wood Strip Installation: The contractor shall use the Rulon clamping tool to snap wood strips onto cliprails. The clips, which are attached to the cliprail, have projections that insert into grooves cut into the back side of the wood strips. Proper tool adjustment is important to assure that the clips achieve a deep seat within the wood grooves. Installation shall proceed, in sequence, from one wall to the opposite side.

When installing Linear Open Style ceilings with fiberfelt spacer, the contractor shall hang wood strips with felt edge facing the area yet to be filled. When installing Linear Open Style ceilings with hardboard spacer, the contractor shall hang a wood strip, then insert the hardboard spacer in the notched area on the back of the board with spacer edge facing the area yet to be filled. Then the next board may be installed over the spacer.

- E. HVAC and Light Fixture Suspensions: Electrical and mechanical installations must be supported independently of the linear wood ceiling

3.03 ADJUSTMENT, CLEANING, and REPAIR

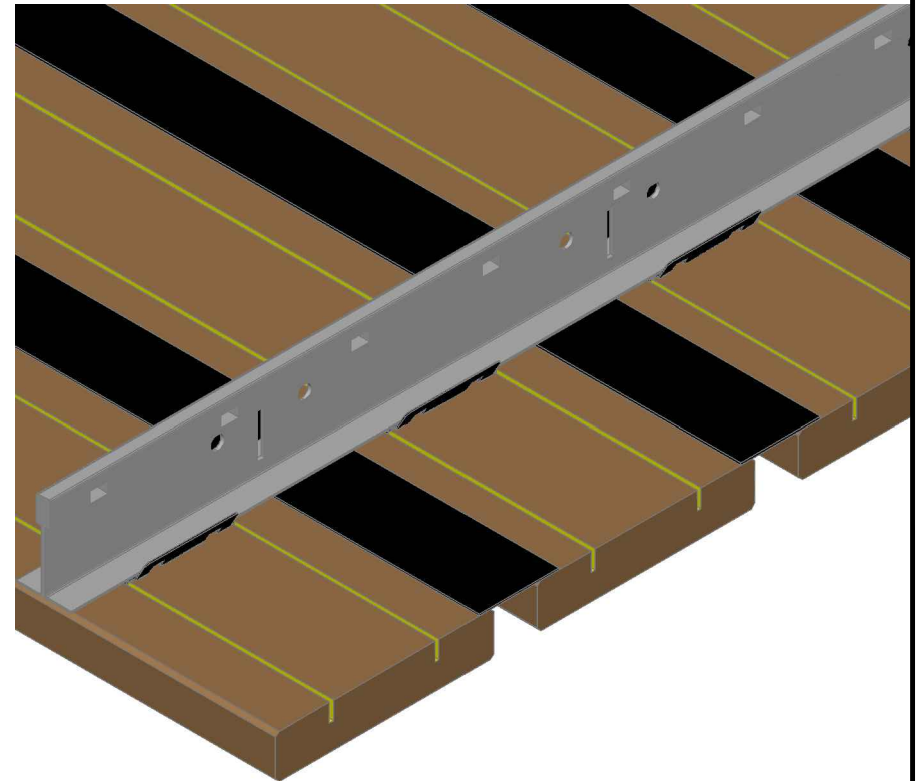
- A. Contractor shall make final adjustments to level or contours.
- B. Upon completion of ceiling installation, all Linear Wood Strips and borders shall be cleaned free of dirt, dust, grease, oils, and fingerprints.
- C. All work that cannot be successfully cleaned or repaired, shall be removed and replaced.


3.04 INSPECTION

Upon completion of ceiling installation, the owner's representative shall inspect all finished surfaces to ensure that the work has been completed in a manner satisfactory to the owner. Any deficiencies in the installed ceiling shall be corrected by the contractor at no additional cost to the owner, or to the ceiling manufacturer.

<u>DRAWING #</u>	<u>TITLE</u>
LOCXF001	Linear Open Ceiling Profile - 4½" Module w/Fiberfelt Spacers
LOCXF002	Ceiling Board Installation Method - Linear Open Style
LOCXF003	Cliprail Installation Detail - Linear Open Style
LOCXF004	Perimeter Detail - Linear Open Style
LOCXF005	Board Connection Detail - Linear Open Style
LOCXF006	Access Panel Detail - Linear Open Style
LOCXF007	Sprinkler Detail - Linear Open Style
LOCXF008	Recessed Can Light Detail - Linear Open Style
LOCXF009	Strip Light Fixture Detail - Linear Open Style
LOCXF011	Seismic Detail - Linear Open Style
LOCXF013	Cliprail Radius Detail - Linear Open Style
LOCXF015	Direct Mounting Detail - Ceiling - L-Bracket Method - Linear Open Style

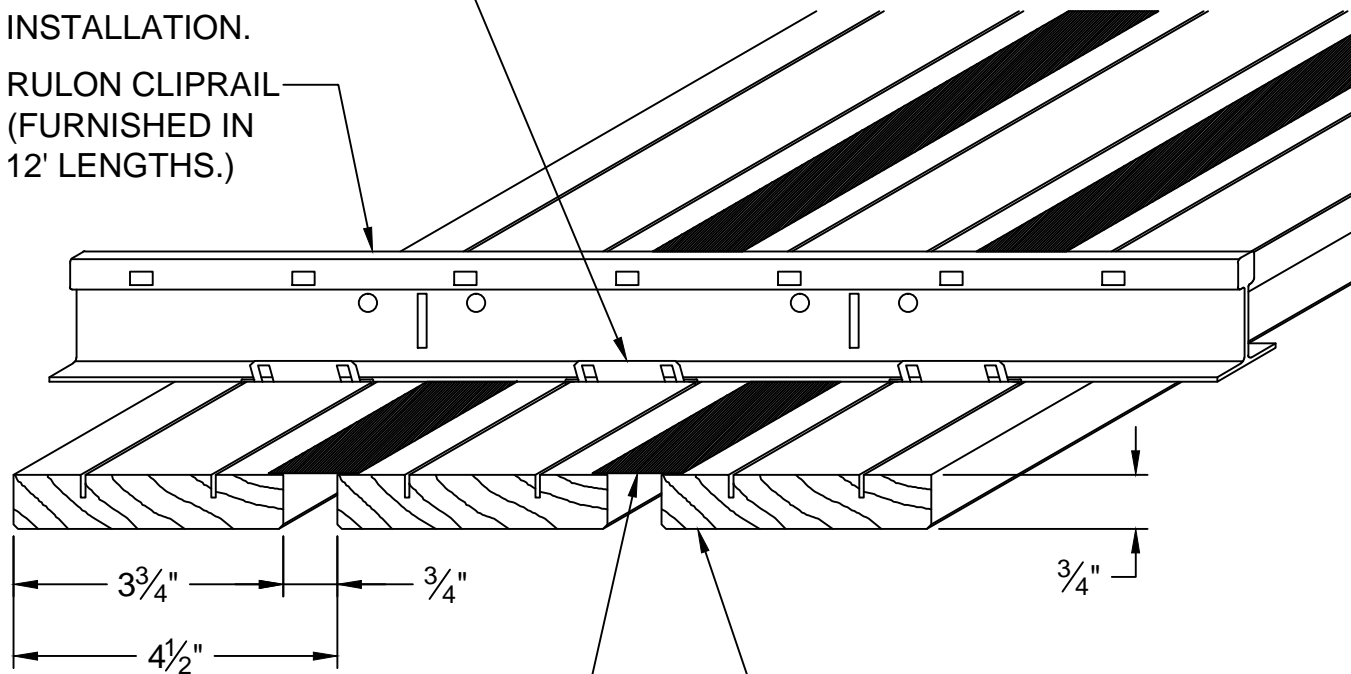
<u>DRAWING #</u>	<u>TITLE</u>
LOC6F001	Linear Open Ceiling Profile - 6" Module w/Fiberfelt Spacers
LOCXH001	Linear Open Profile - 4½" Module w/Hardboard Spacers



 RULON INTERNATIONAL	World Commerce Center 2000 Ring Way Road St. Augustine, FL 32092 Ph: 1-800-227-8566 904-584-1400 Fax: 904-584-1499 www.rulonco.com info@rulonco.com	PROJECT: TITLE: Linear Open Style Index	ISSUE DATE: REVISION DATE: MAY/13/2011	DRAWN BY: CAP CHECKED BY: TA	PROJECT NUMBER: DRAWING NUMBER: LOCINDEX
---	--	---	---	---	---

FACTORY-ATTACHED
CLIPS. PRE-POSITIONED
FOR EASE OF
INSTALLATION.

RULON CLIPRAIL
(FURNISHED IN
12' LENGTHS.)



BLACK FIBERFELT SPACER
(FACTORY-ATTACHED TO
ONE BOARD)

LINEAR BOARD



RULON INTERNATIONAL

World Commerce Center
2000 Ring Way Road
St. Augustine, FL 32092
Ph: 1-800-227-8566
904-584-1400
Fax: 904-584-1499
www.rulonco.com
info@rulonco.com

PROJECT:

TITLE:

Linear Open Ceiling Profile -
4 1/2" Module w/Fiberfelt Spacers

ISSUE DATE:

MAY/11/2011

DRAWN BY:

CAP

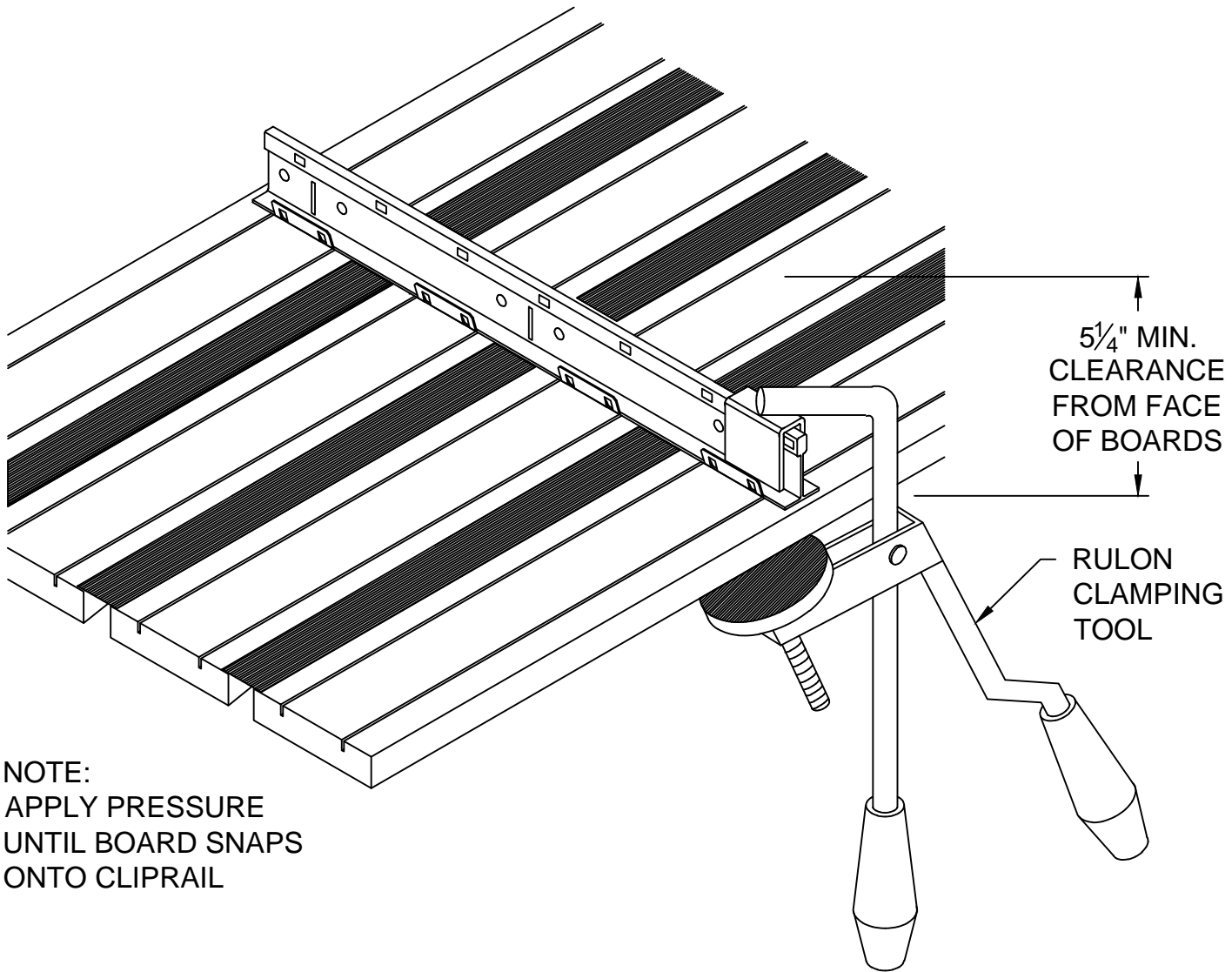
CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

LOCXF001



RULON INTERNATIONAL

World Commerce Center
2000 Ring Way Road
St. Augustine, FL 32092
Ph: 1-800-227-8566
904-584-1400
Fax: 904-584-1499
www.rulonco.com
info@rulonco.com

PROJECT:

TITLE:

Ceiling Board Installation Detail -
Linear Open Style

ISSUE DATE:

REVISION DATE:

MAY/11/2011

DRAWN BY:

CAP

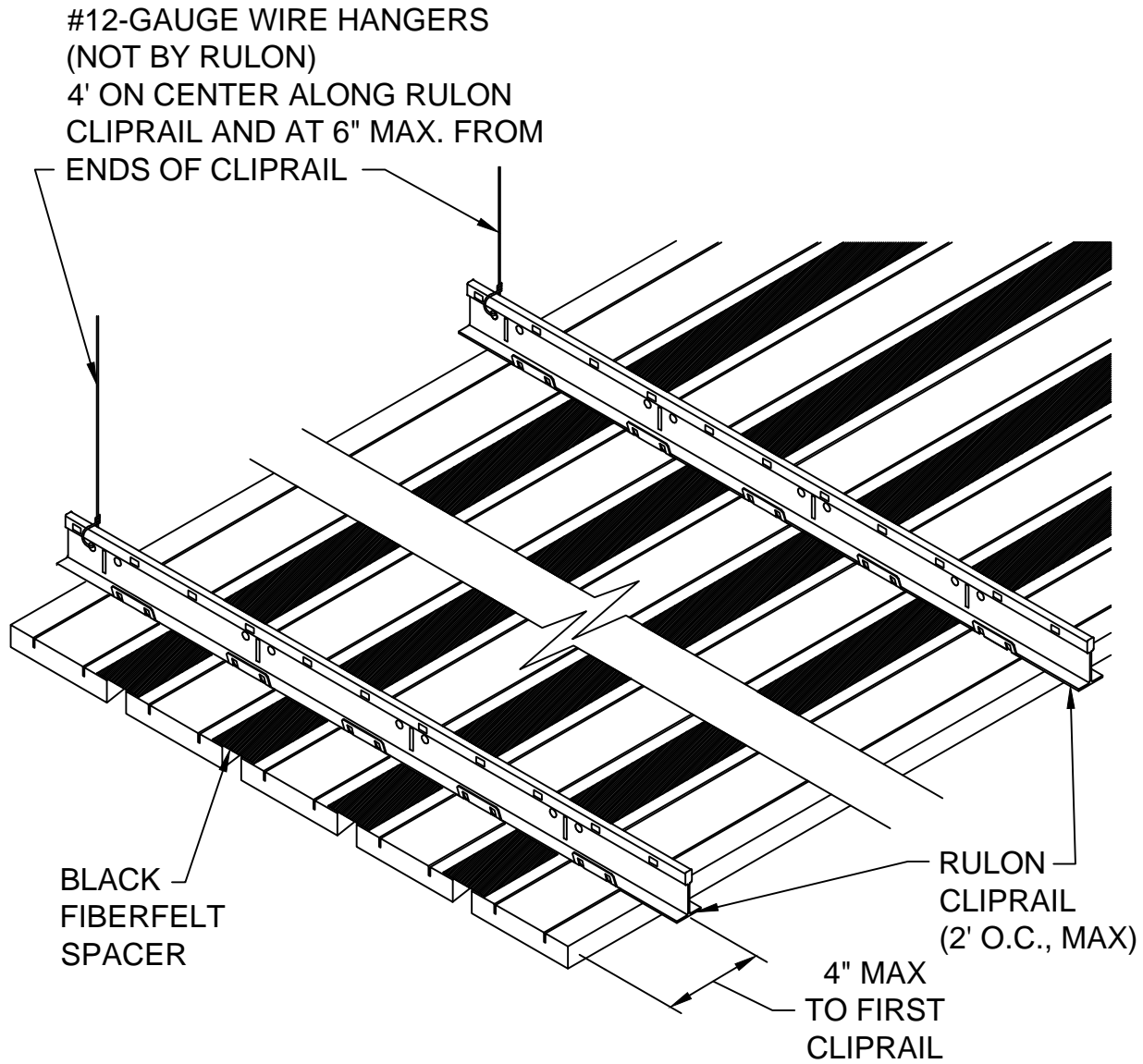
CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

LOCXF002



#12-GAUGE WIRE HANGERS
 (NOT BY RULON)
 4' ON CENTER ALONG RULON
 CLIPRAIL AND AT 6" MAX. FROM
 ENDS OF CLIPRAIL

BLACK
 FIBERFELT
 SPACER

RULON
 CLIPRAIL
 (2' O.C., MAX)

4" MAX
 TO FIRST
 CLIPRAIL



RULON INTERNATIONAL

World Commerce Center
 2000 Ring Way Road
 St. Augustine, FL 32092
 Ph: 1-800-227-8566
 904-584-1400
 Fax: 904-584-1499
 www.rulonco.com
 info@rulonco.com

PROJECT:

TITLE:

Cliprail Installation Detail - Linear
 Open Style

ISSUE DATE:

REVISION DATE:

MAY/11/2011

DRAWN BY:

CAP

CHECKED BY:

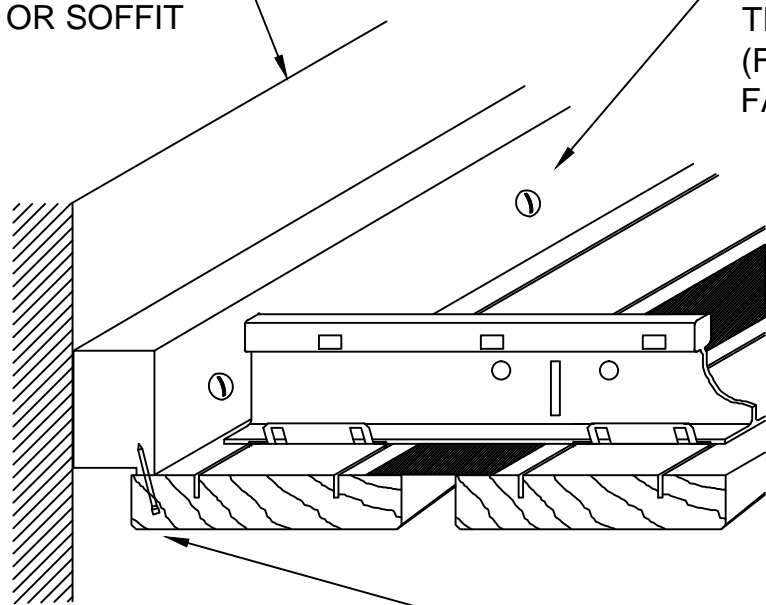
TA

PROJECT NUMBER:

DRAWING NUMBER:

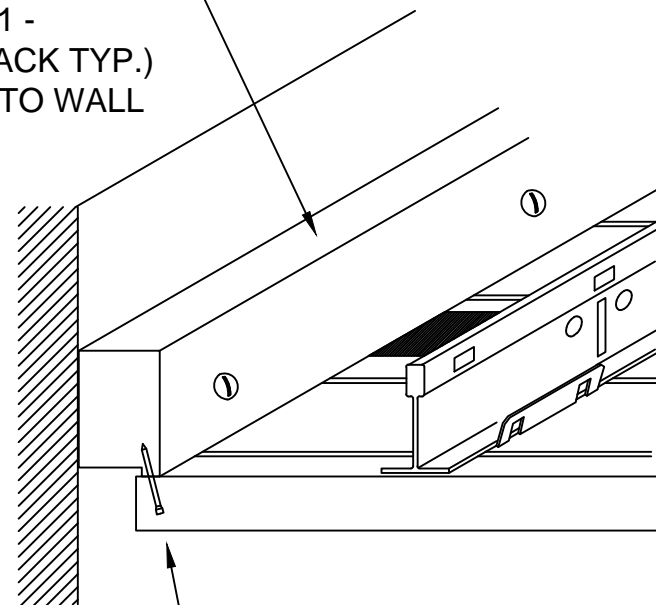
LOCXF003

WALL, BEAM
OR SOFFIT



SIDE INSTALLATION

RULON PERIMETER
TRIM #101 -
(FLAT BLACK TYP.)
FASTEN TO WALL



END INSTALLATION

NAIL OR STAPLE



RULON INTERNATIONAL

World Commerce Center
2000 Ring Way Road
St. Augustine, FL 32092
Ph: 1-800-227-8566
904-584-1400
Fax: 904-584-1499
www.rulonco.com
info@rulonco.com

PROJECT:

TITLE:

**Perimeter Detail -
Linear Open Style**

ISSUE DATE:

MAY/11/2011

DRAWN BY:

CAP

CHECKED BY:

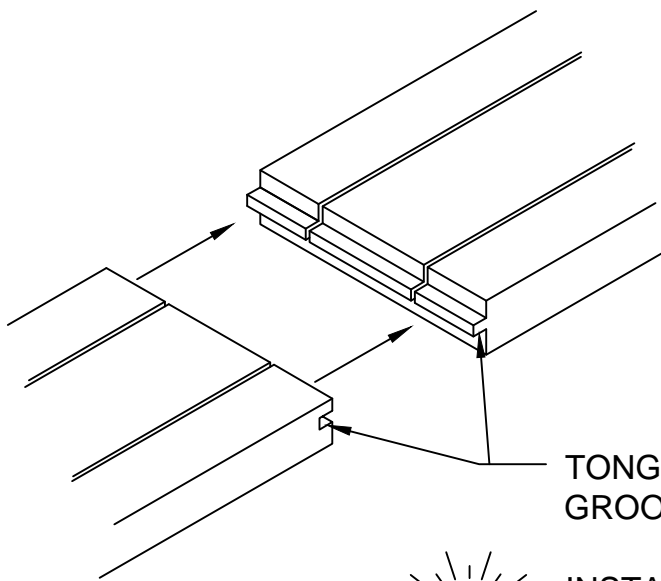
TA

PROJECT NUMBER:

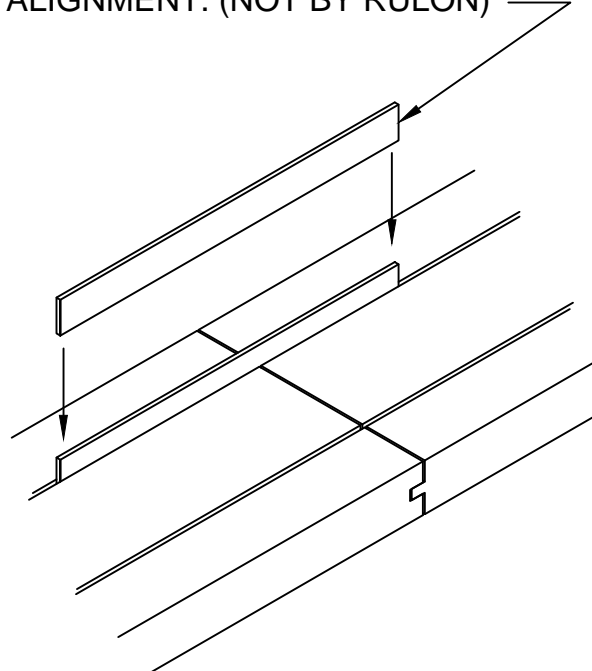
DRAWING NUMBER:

LOCXF004

1/16" THICK STEEL STRIP OR WIRE SHOULD BE INSERTED INTO SLOT ON BACK OF CEILING BOARD AT T&G END JOINTS TO HELP BOARD ALIGNMENT. (NOT BY RULON)



TONGUE AND GROOVE ENDS



INSTALLATION TIP:
 ONLY ONE (1) STEEL STRIP OR WIRE PIECE IS NEEDED AT EACH CONNECTION. INSTALL WITH CLAMPING TOOL. A FINISH NAIL MAY ALSO BE USED.



RULON INTERNATIONAL

World Commerce Center
 2000 Ring Way Road
 St. Augustine, FL 32092
 Ph: 1-800-227-8566
 904-584-1400
 Fax: 904-584-1499
 www.rulonco.com
 info@rulonco.com

PROJECT:

TITLE: **Board Connection Detail - Linear Open Style**

ISSUE DATE:

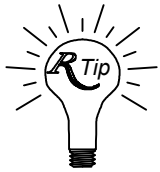
REVISION DATE:
MAY/11/2011

DRAWN BY:
CAP

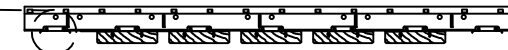
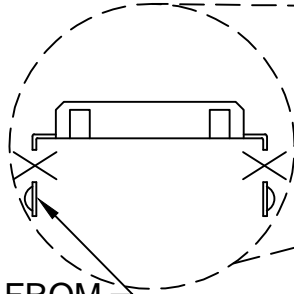
CHECKED BY:
TA

PROJECT NUMBER:

DRAWING NUMBER:
LOCXF005



REMOVE BARBS FROM
END CLIPS LEAVING
TABS PARTIALLY
INTACT FOR SEATING
INTO CORRESPONDING
GROOVES



ACCESS PANEL SECTION

ACCESS PANEL
REMOVED

3) DIRECT SCREW
BOARDS ADJACENT
TO ACCESS PANEL

1) CUT BOARDS FOR
ACCESS PANEL

2) ATTACH CUT BOARDS TO SHORT PIECES OF
CLIPRAIL THAT WILL BRIDGE TO UNCUT CEILING
AREA.



RULON INTERNATIONAL

World Commerce Center
2000 Ring Way Road
St. Augustine, FL 32092
Ph: 1-800-227-8566
904-584-1400
Fax: 904-584-1499
www.rulonco.com
info@rulonco.com

PROJECT:

ISSUE DATE:

DRAWN BY:

PROJECT NUMBER:

TITLE:

Access Panel Detail -
Linear Open Style

REVISION DATE:

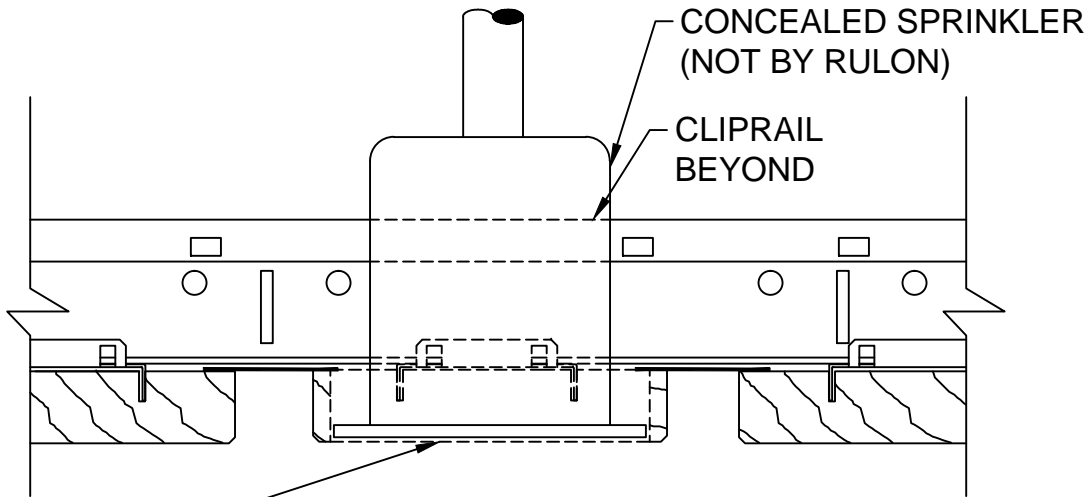
MAY/11/2011

CHECKED BY:

TA

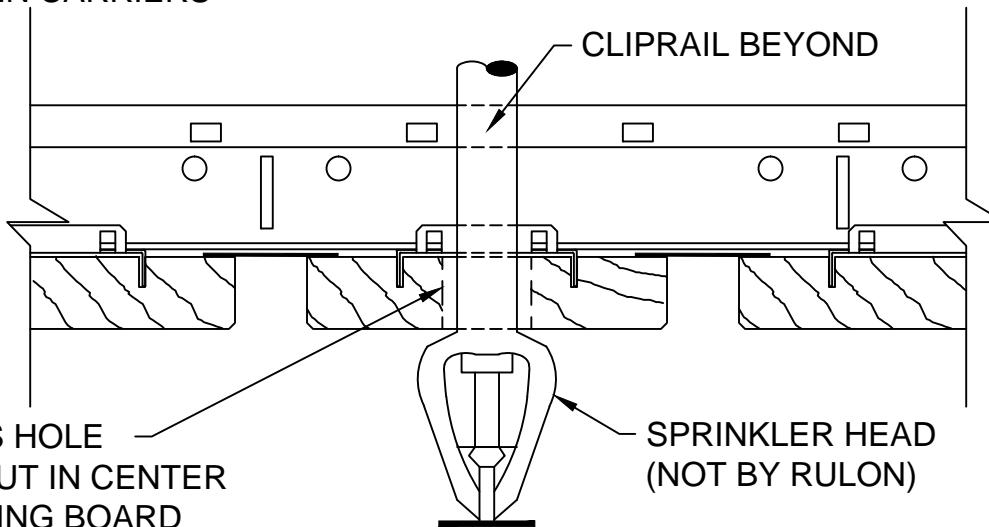
DRAWING NUMBER:

LOCXF006



CONCEALED
SPRINKLER

ACCESS HOLE
FIELD-CUT IN CENTER
OF CEILING BOARD
BETWEEN CARRIERS



STANDARD
SPRINKLER

ACCESS HOLE
FIELD-CUT IN CENTER
OF CEILING BOARD
BETWEEN CARRIERS



RULON INTERNATIONAL

World Commerce Center
2000 Ring Way Road
St. Augustine, FL 32092
Ph: 1-800-227-8566
904-584-1400
Fax: 904-584-1499
www.rulonco.com
info@rulonco.com

PROJECT:

TITLE:

**Sprinkler Detail -
Linear Open Style**

ISSUE DATE:

MAY/11/2011

DRAWN BY:

CAP

CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

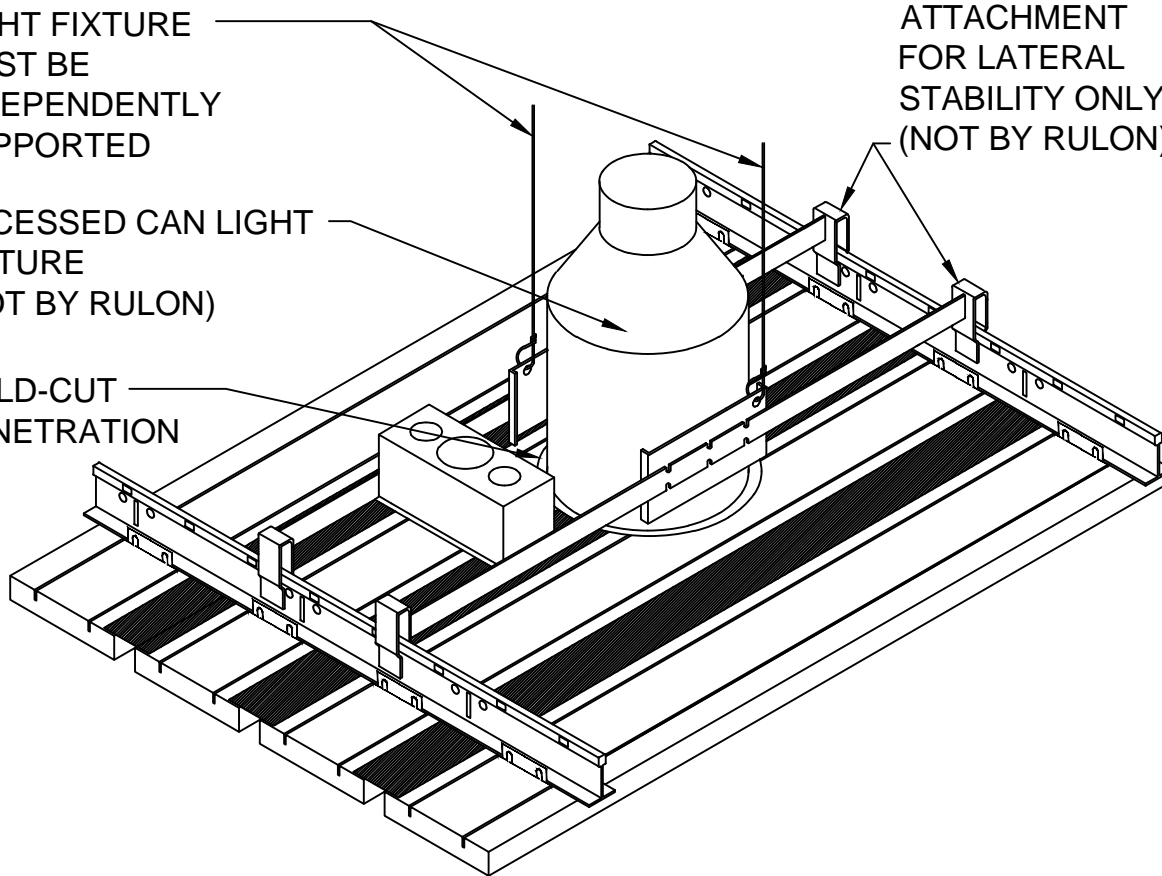
LOCXF007

LIGHT FIXTURE
MUST BE
INDEPENDENTLY
SUPPORTED

RECESSED CAN LIGHT
FIXTURE
(NOT BY RULON)

FIELD-CUT
PENETRATION

ATTACHMENT
FOR LATERAL
STABILITY ONLY
(NOT BY RULON)



RULON INTERNATIONAL

World Commerce Center
2000 Ring Way Road
St. Augustine, FL 32092
Ph: 1-800-227-8566
904-584-1400
Fax: 904-584-1499
www.rulonco.com
info@rulonco.com

PROJECT:

TITLE:

**Recessed Can Light Detail -
Linear Open Style**

ISSUE DATE:

REVISION DATE:

MAY/11/2011

DRAWN BY:

CAP

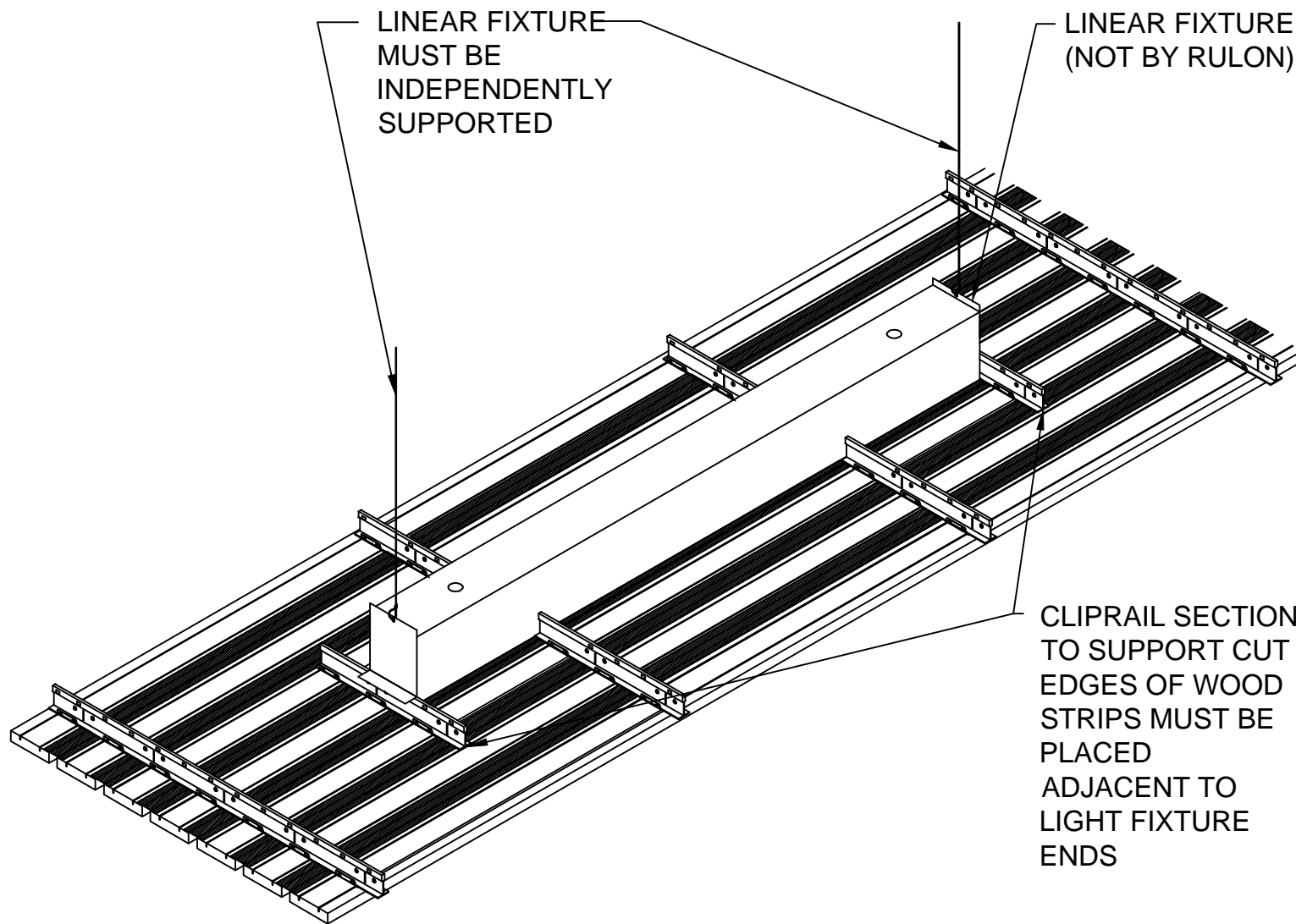
CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

LOCXF008



RULON INTERNATIONAL

World Commerce Center
 2000 Ring Way Road
 St. Augustine, FL 32092
 Ph: 1-800-227-8566
 904-584-1400
 Fax: 904-584-1499
 www.rulonco.com
 info@rulonco.com

PROJECT:

TITLE: **Strip Light Fixture Detail -
 Linear Open Style**

ISSUE DATE:

REVISION DATE:
MAY/11/2011

DRAWN BY:

CAP

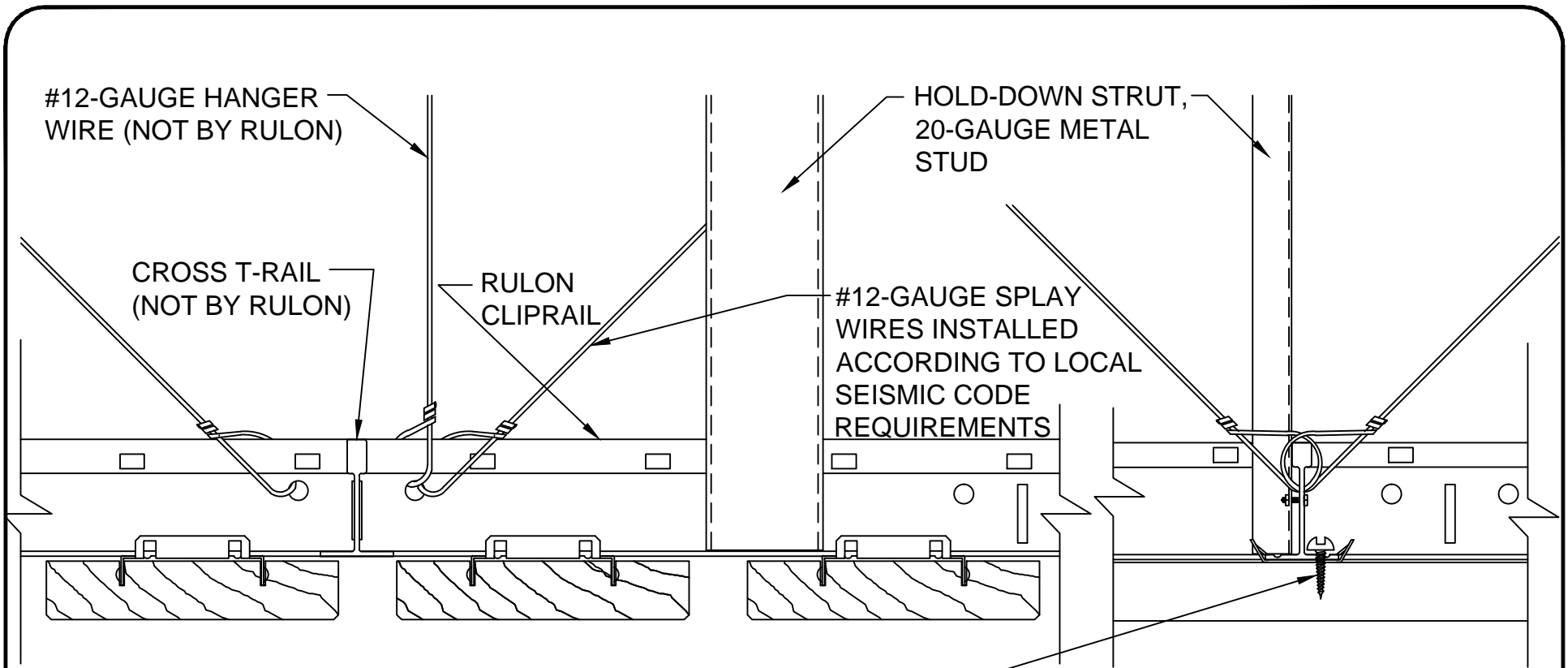
CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

LOCXF009



SECTION THROUGH BOARDS

SECTION THROUGH CLIPRAIL

NOTE: SUSPENSION SYSTEM TO BE INSTALLED ACCORDING TO LOCAL SEISMIC CONDITION CODE REQUIREMENTS. SUSPENSION SYSTEM NOT BUY RULON.

AT THE CLIP CLOSEST TO THE END OF EACH CEILING BOARD, SCREW THROUGH HOLE PROVIDED IN CLIP INTO CEILING BOARD (BOTH ENDS OF EACH BOARD)



RULON INTERNATIONAL

World Commerce Center
 2000 Ring Way Road
 St. Augustine, FL 32092
 Ph: 1-800-227-8566
 904-584-1400
 Fax: 904-584-1499
 www.rulonco.com
 info@rulonco.com

PROJECT:

TITLE:

**Seismic Detail -
 Linear Open Style**

ISSUE DATE:

MAY/11/2011

DRAWN BY:

CAP

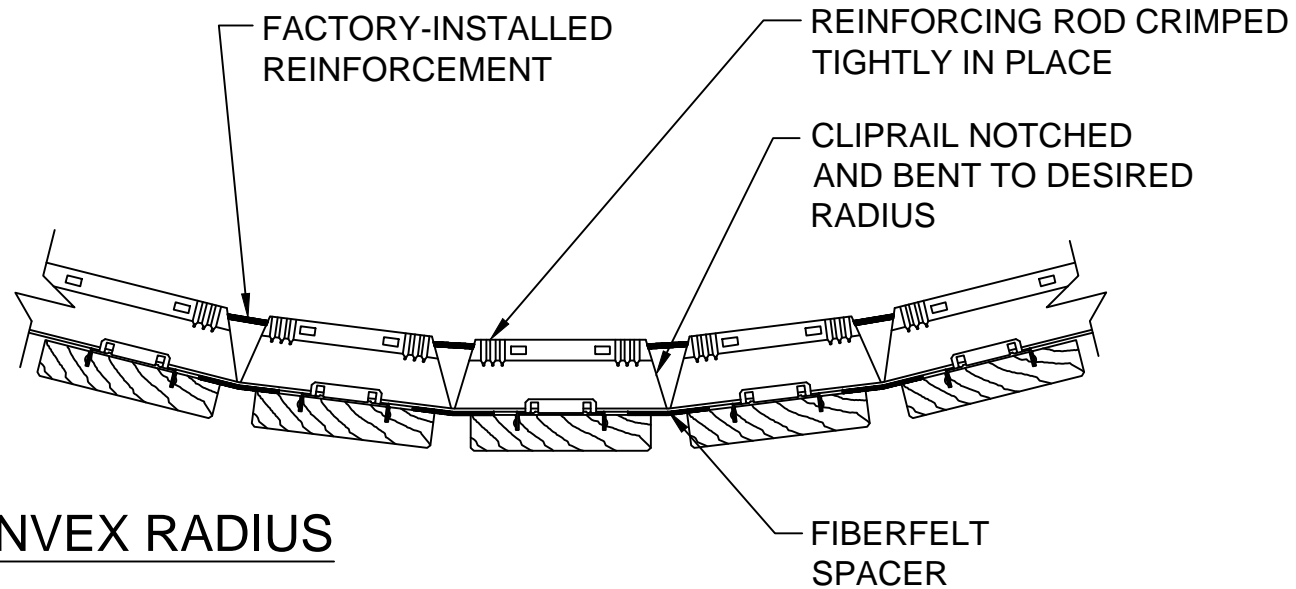
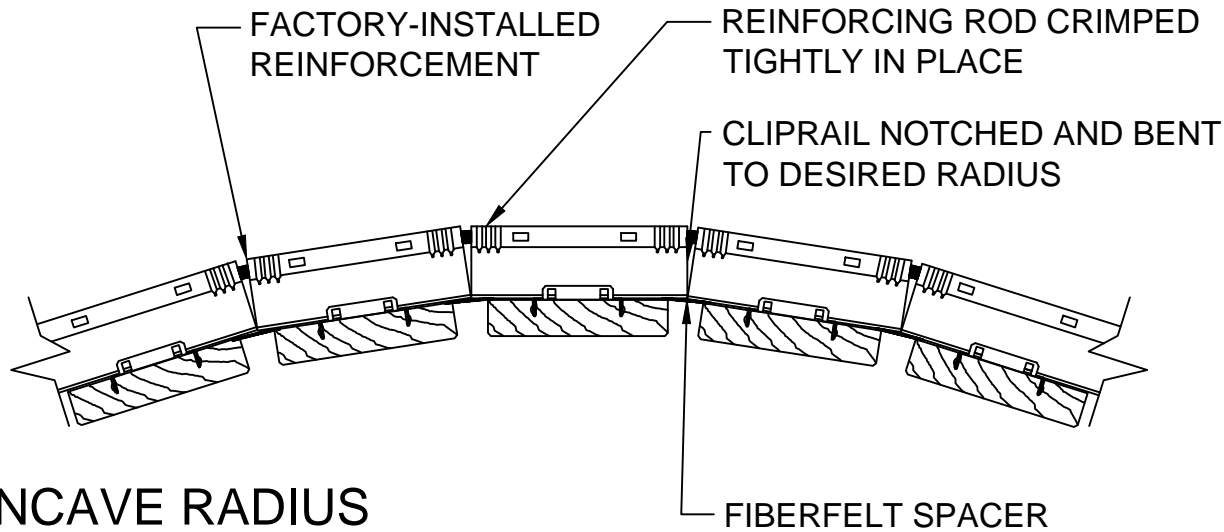
CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

LOCXF011



RULON INTERNATIONAL

World Commerce Center
 2000 Ring Way Road
 St. Augustine, FL 32092
 Ph: 1-800-227-8566
 904-584-1400
 Fax: 904-584-1499
 www.rulonco.com
 info@rulonco.com

PROJECT:

TITLE:

Cliprail Radius Detail Linear Open Style

ISSUE DATE:

REVISION DATE:

MAY/11/2011

DRAWN BY:

CAP

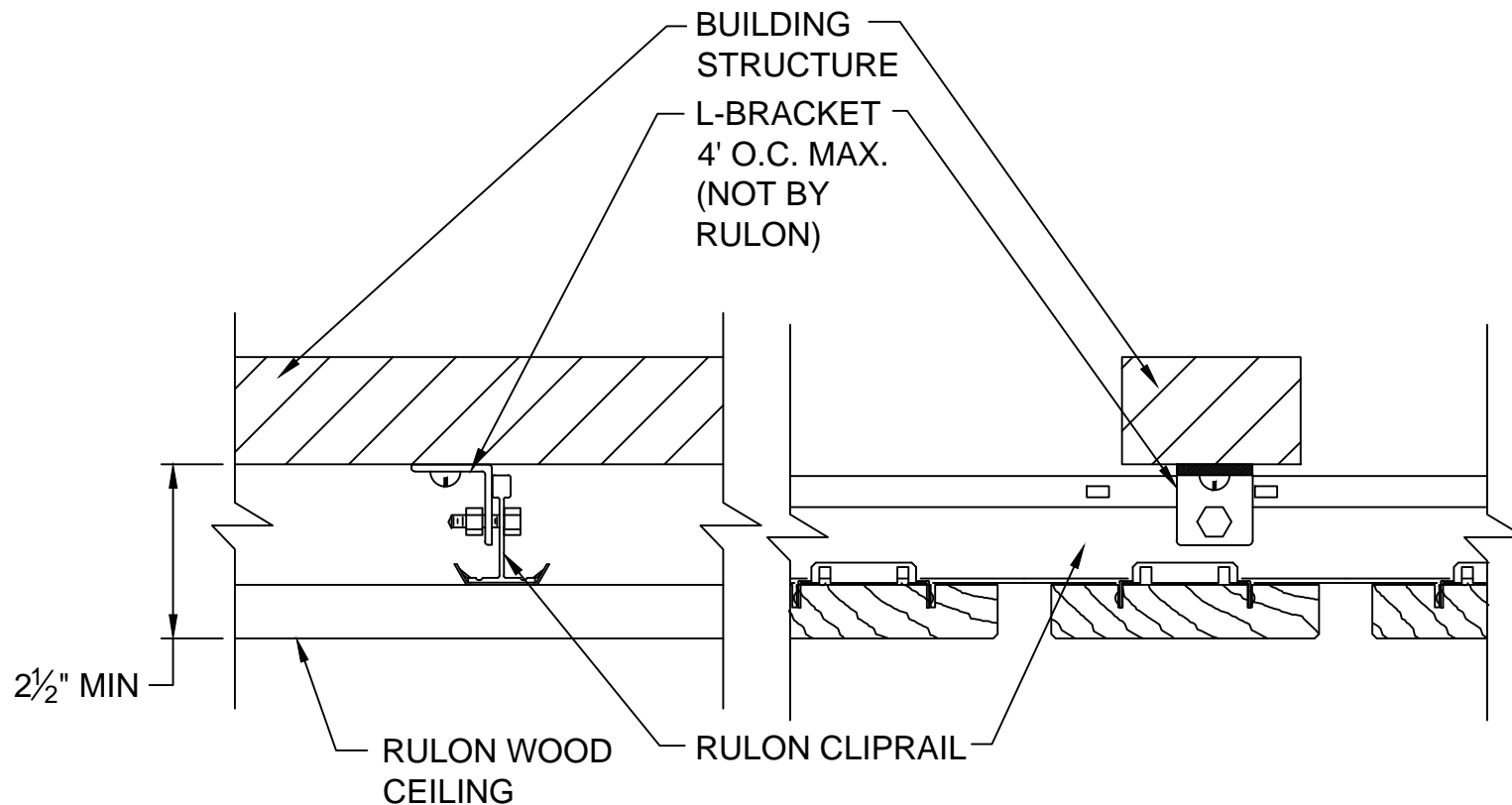
CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

LOCXF013



SECTION THROUGH CLIPRAIL

SECTION THROUGH BOARDS



RULON INTERNATIONAL

World Commerce Center
 2000 Ring Way Road
 St. Augustine, FL 32092
 Ph: 1-800-227-8566
 904-584-1400
 Fax: 904-584-1499
 www.rulonco.com
 info@rulonco.com

PROJECT:

TITLE:

**Direct Mounting Detail - Ceiling -
 L-Bracket Method - Linear Open Style**

ISSUE DATE:

REVISION DATE:

MAY/11/2011

DRAWN BY:

CAP

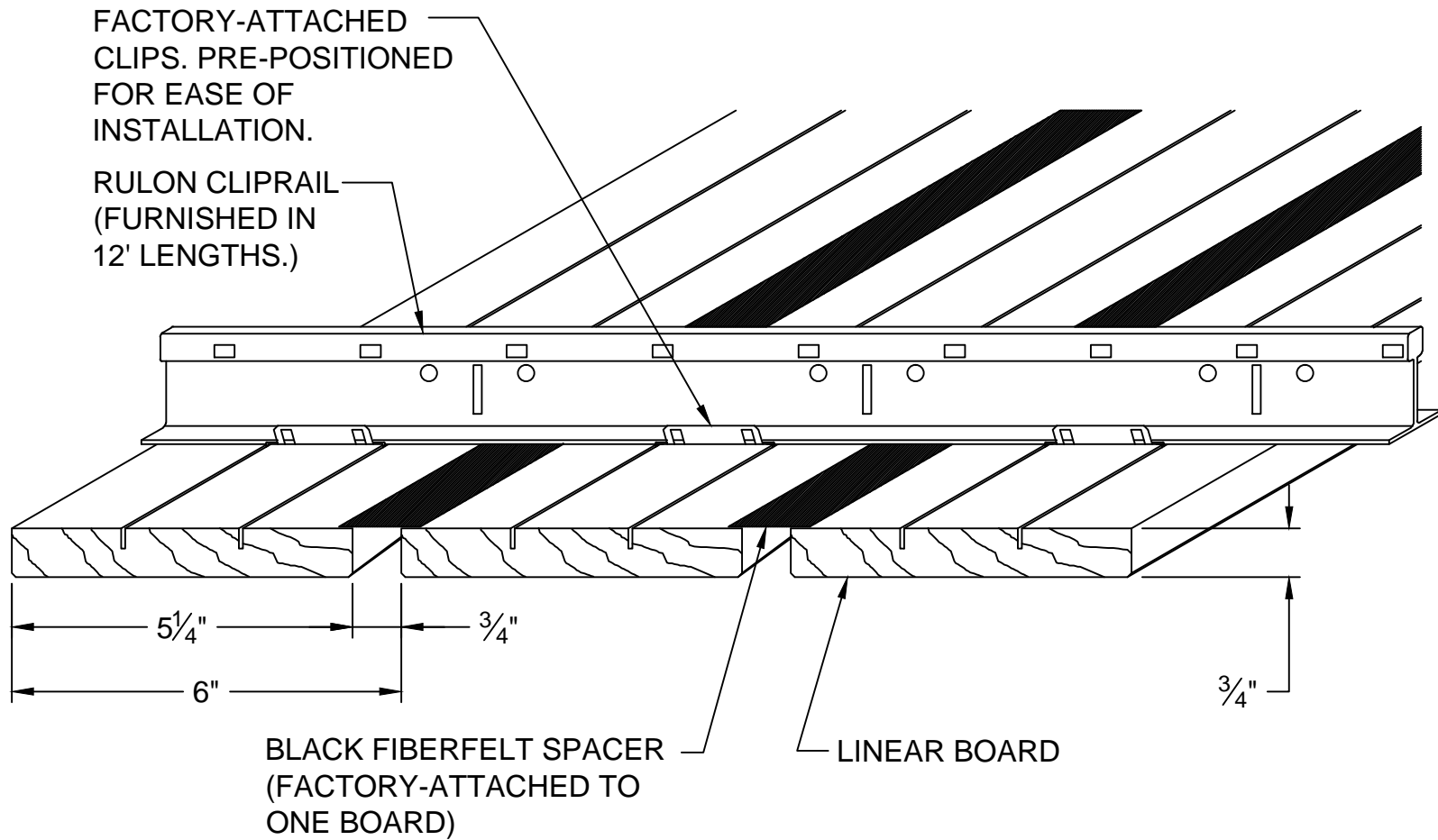
CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

LOCXF015



World Commerce Center
 2000 Ring Way Road
 St. Augustine, FL 32092
 Ph: 1-800-227-8566
 904-584-1400
 Fax: 904-584-1499
 www.rulonco.com
 info@rulonco.com

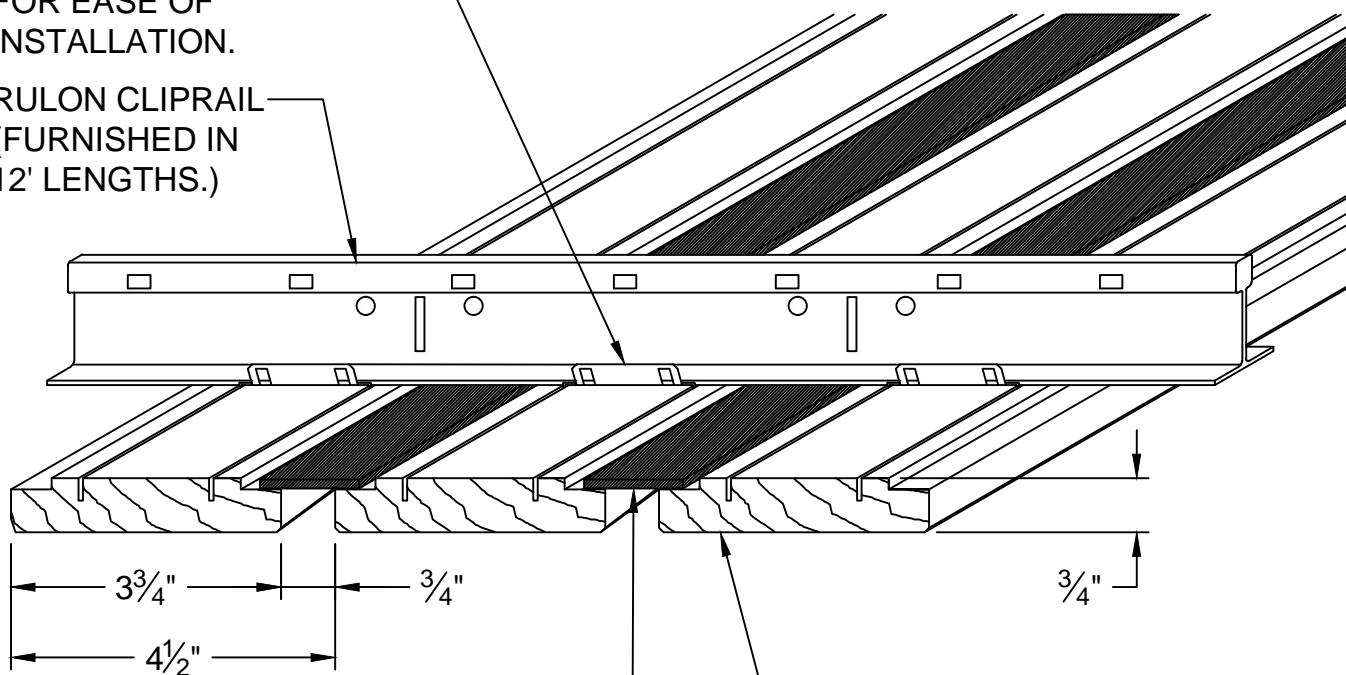
PROJECT:	ISSUE DATE:
TITLE: Linear Open Ceiling Profile - 6" Module w/Fiberfelt Spacers	REVISION DATE: MAY/11/2011

DRAWN BY: CAP
CHECKED BY: TA

PROJECT NUMBER:
DRAWING NUMBER: LOC6F001

FACTORY-ATTACHED
CLIPS. PRE-POSITIONED
FOR EASE OF
INSTALLATION.

RULON CLIPRAIL
(FURNISHED IN
12' LENGTHS.)



1/8" THICK HARDBOARD SPACER -
INSERT SEQUENTIALLY WITH
CEILING BOARDS AS INSTALLATION
PROCEEDS

LINEAR BOARD



RULON INTERNATIONAL

World Commerce Center
2000 Ring Way Road
St. Augustine, FL 32092
Ph: 1-800-227-8566
904-584-1400
Fax: 904-584-1499
www.rulonco.com
info@rulonco.com

PROJECT:

TITLE:

Linear Open Profile -
4 1/2" Module w/Hardboard Spacers

ISSUE DATE:

MAY/11/2011

DRAWN BY:

CAP

CHECKED BY:

TA

PROJECT NUMBER:

DRAWING NUMBER:

LOCXH001