Code Compliance Research Report
CCRR-0260

Issue Date: 03-07-2017
Revision Date: 03-28-2025
Renewal Date: 03-31-2026

DIVISION: 09 50 00 - CEILINGS
Section: 09 51 00 – Acoustical Ceilings
Section: 09 51 33 13 – Acoustical Snap in Metal Pan Ceiling

REPORT HOLDER:
Roxul USA, Inc. dba Rockfon
4849 S. Austin Ave.
Chicago, IL 60638
www.rockfon.com

REPORT SUBJECT:
SpanAir™ Torsion Spring Plus Concealed Metal Ceiling System

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2021, 2018 and 2015 *International Building Code®* (IBC)

NOTE: This report references the most recent Code edition noted. Section numbers for earlier Code editions may differ.

1.2 *SpanAir™ Torsion Spring Plus Concealed Metal Ceiling System* has been evaluated for the following properties (see Table 1):

- Seismic
- Structural

1.3 *SpanAir™ Torsion Spring Plus Concealed Metal Ceiling System* has been evaluated for the following uses (see Table 1):

- Suspended large panel metal ceiling system primarily installed in large open areas such as corridors, passenger terminals and lobby areas.
- The SpanAir ceiling system is an aluminum panel ceiling system attached to a suspended modular grid framing system by concealed torsion springs allowing for downward accessibility.
- The torsion spring panels integrate with and conceal the suspension system by utilizing slots evenly spaced along flanges of the grid system.

2.0 STATEMENT OF COMPLIANCE

SpanAir™ Torsion Spring Plus Concealed Metal Ceiling System complies with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.

3.0 DESCRIPTION

3.1 Materials

3.1.1 SpanAir Torsion Spring Plus Panels are manufactured from .040-inch-thick aluminum.

3.1.2 The suspended grid system components consist of main runners and cross runners formed from cold rolled hot dipped G30 minimum galvanized steel.

3.1.3 Main runner is manufactured from steel with a minimum yield strength of 44 ksi.

3.1.4 Cross Runners are manufactured from steel with a minimum yield strength of 52 ksi.

3.2 Dimensions

3.2.1 ATS panels are available in widths from 24 to 48 inches and 24 to 120 inches in length.

3.2.2 ATSD panels are available in widths from 6 to 24 inches and 24 to 120 inches in length and, may be perforated with a maximum open area of 70%.

3.2.3 The suspended grid components consist of cross tees available in lengths of 24, 36, and 48 inches, and a main runner 144 inches in length.

4.0 PERFORMANCE CHARACTERISTICS

The SpanAir Torsion Spring Plus ceiling system has been evaluated to the requirements of ICC-ES AC156 *Acceptance Criteria for Seismic Certification by Shake-Table Testing of Nonstructural Components* for use in seismic design category C in areas of moderate seismic activity and Seismic Categories D, E, and F for areas of severe seismic activity.

5.0 INSTALLATION

5.1 General:

SpanAir™ Torsion Spring Plus Concealed Metal Ceiling System must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

5.2 Application:

The Grid system shall be installed to the requirements of ASTM C636. For seismic design categories C, D, E, and F additional installation requirements detailed in ASTM E580 shall be followed.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 SpanAir panels shall not support any additional weight. Light fixtures, HVAC vents or any other items must be independently supported.

6.3 The SpanAir ceiling system shall not be used to provide lateral support for walls or partitions.

6.4 Suspended ceiling systems must be designed and installed in accordance with ASCE 7, Section 13.5.6. The documents must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

6.5 Where special inspections are required by the building official, a statement of special inspection shall be provided in accordance with IBC Section 1704.3. Special inspector shall verify ceiling installation is in compliance with Section 6.1 of this report.

6.6 A statement of special inspection shall be provided for use in Seismic Design Categories C, D, E, and F where seismically qualified through testing as required by IBC Sections 1705.1.1, 1704.5 and 1705.14.2.

6.7 The *SpanAir™ Torsion Spring Plus Concealed Metal Ceiling System* is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Data of seismic performance in accordance with AC156 ICC-ES Acceptance Criteria for Seismic Certification by Shake-Table Testing of Nonstructural Components revised December 2020.

7.2 Data in accordance with AC368 ICC-ES Acceptance Criteria for Suspended Ceiling Framing Systems, approved January 2022.

7.3 Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

8.0 IDENTIFICATION

The *SpanAir™ Torsion Spring Plus Concealed Metal Ceiling System* is identified with the manufacturer's name (Roxul USA, Inc. dba Rockfon), address and telephone number, the product name (*SpanAir™ Torsion Spring Plus Concealed Metal Ceiling System*), the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0260).

CODE COMPLIANCE
Intertek
CCRR-0260

9.0 OTHER CODES

This section is not applicable.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the https://bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

10.4TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2021 IBC SECTIONS	2018/2015 IBC SECTIONS
Seismic	1705.14.2, 1705.13.4	1705.13.2, 1705.13.3
Structural	1613.1, 2506.2.1, 104.11	1613.1, 2506.2.1, 104.11

TABLE 2 – SUSPENSION GRID SYSTEM COMPONENTS

	Item Number	Length (in)	Material Thickness (in)	Simple Span Uniform	
				Span (in.)	lbs./LF
Main Runner	10.00.421.000	144	0.020	48	16.12
Cross Tee	10.00.424.000	48	0.0195	48	18.3
Cross Tee[1]	10.00.423.000	36	0.0195	36	39.8
Wall Channel	60.00.006.001	120	.024 Aluminum		
Spacer Bar	828	48	0.0185		
Brace Attachment	989	N/A	0.042		
Hold-down channel	60.00.037	48	0.03		
Hold-down channel	60.00.038	15	0.03		
Hold-down channel	60.00.044	22	0.024		
Hold-down channel	60.00.043	4	0.024		

[1]Cross Tees shorter than 36 in. are permitted the same uniform load as those for 36 in.

TABLE 3A - BASIC SPANAIR TORSION PANEL PLUS ATS DIMENSIONS

Item number	Width (in.)	Length (in.)	Total Springs Per Full Panel
ATS24120X.xxx	24	120	6
ATS24096X.xxx	24	96	6
ATS24072X.xxx	24	72	4
ATS36120.xxx	36	120	10
ATS36108.xxx	36	108	10
ATS36096.xxx	36	96	8
ATS36072.xxx	36	72	6
ATS36036.xxx	36	36	4
ATS48120X.xxx	48	120	10
ATS48096X.xxx	48	96	8
ATS48072X.xxx	48	72	6
ATS48048X.xxx	48	48	4

Basic panel sizes shown. Intermediate sizes are available. Allowable sizes range from 24-48 in wide and 24-120 in. long

TABLE 3B - BASIC SPANAIR TORSION PANEL PLUS ATSD DIMENSIONS

Item number	Width (in.)	Length (in.)	Total Springs Per Full Panel
ATSD06024	6	24	4
ATSD06120	6	120	6
ATSD24024	24	24	4
ATSD24072	24	72	4
ATSD24120	24	120	6

Basic panel sizes shown. Intermediate sizes are available. Allowable sizes range from 6-24 in. wide and 24-120 in. long and may be perforated with a maximum open area of 70%

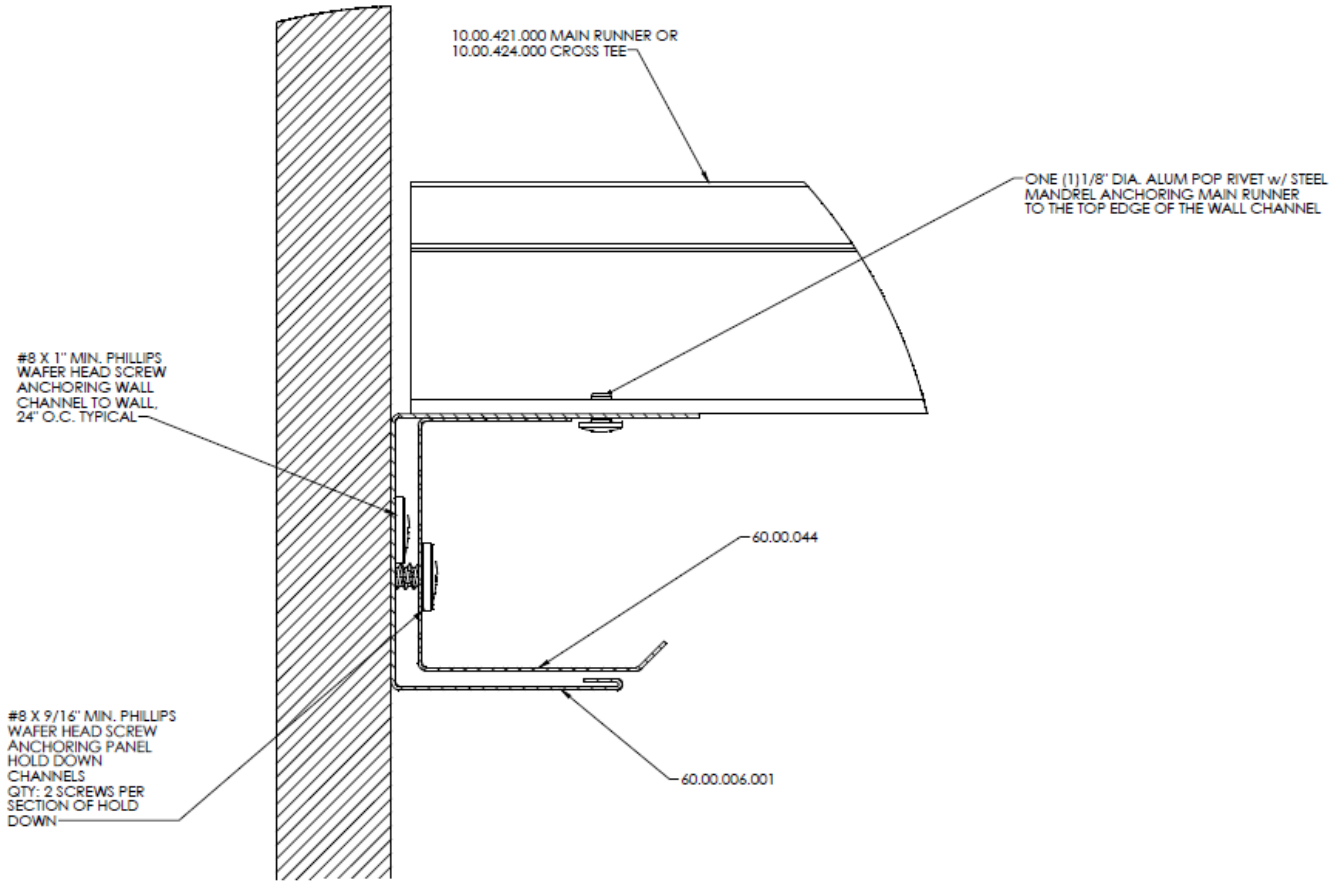

FIGURE 1 – FIXED WALL SEISMIC INSTALLATION DETAIL

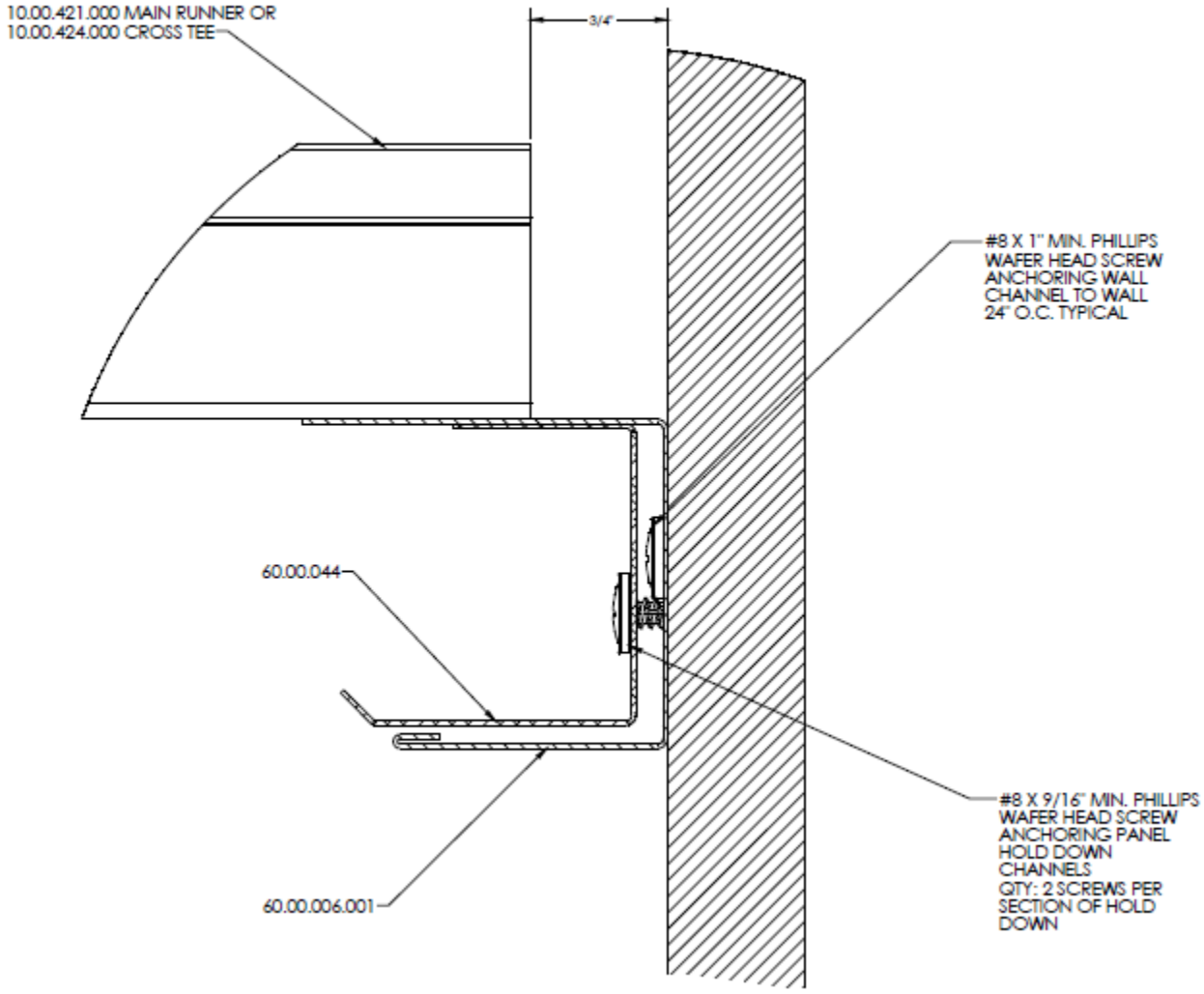

FIGURE 2 – FREE WALL SEISMIC INSTALLATION DETAIL

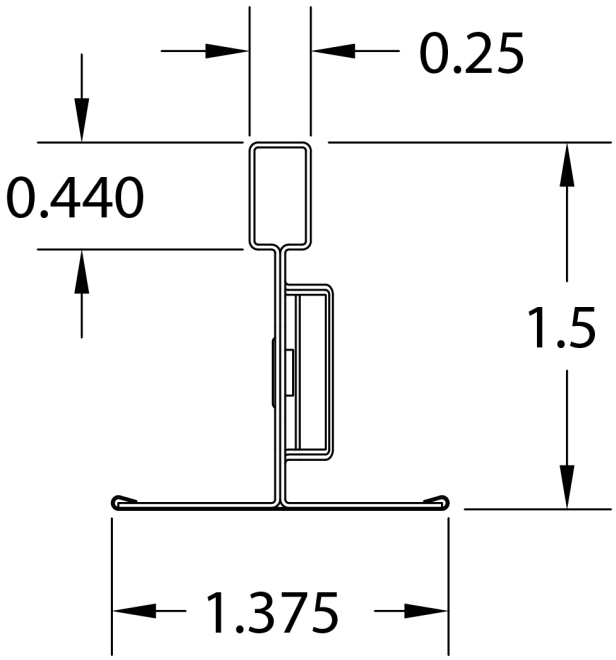

FIGURE 3 – MAIN RUNNER PROFILE

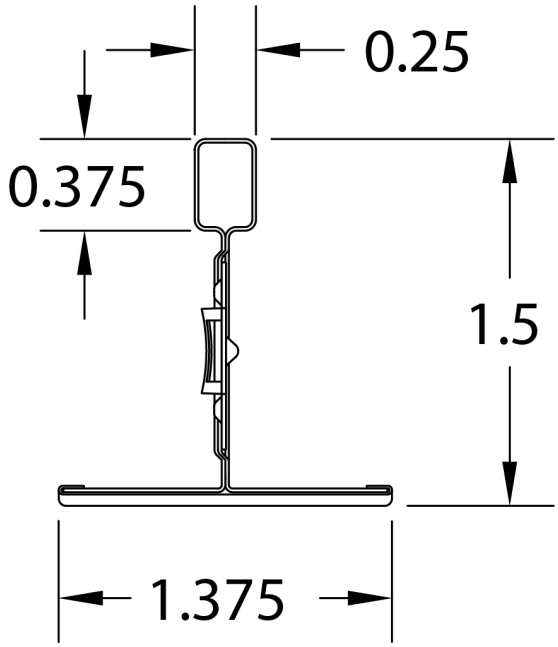

FIGURE 4 – CROSS RUNNER PROFILE

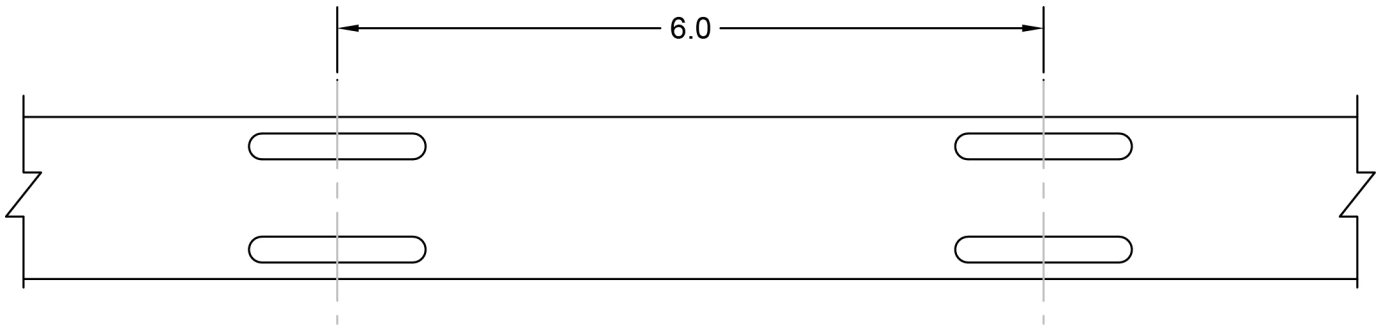

FIGURE 5 - TORSION SPRING SLOTS

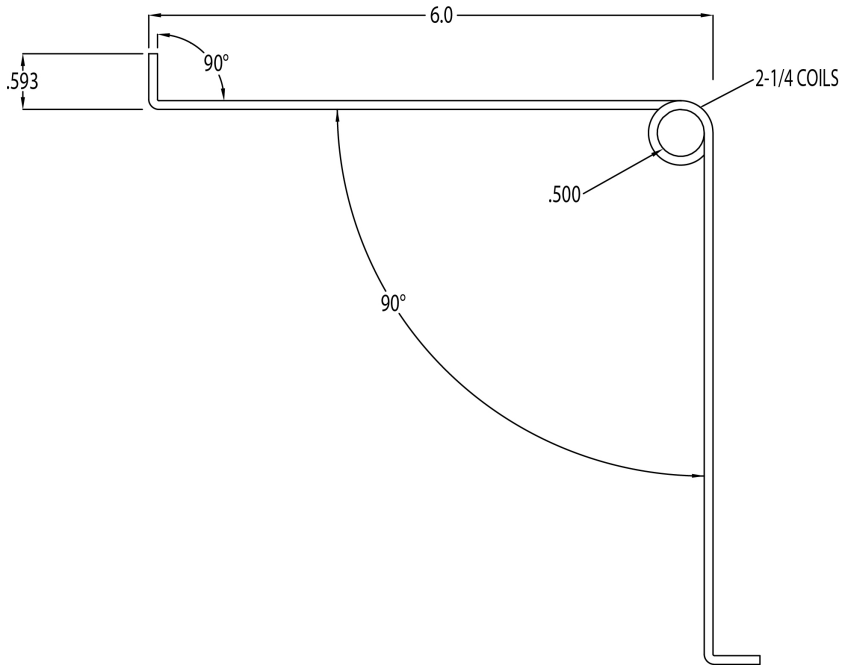

FIGURE 6 - TORSION SPRING