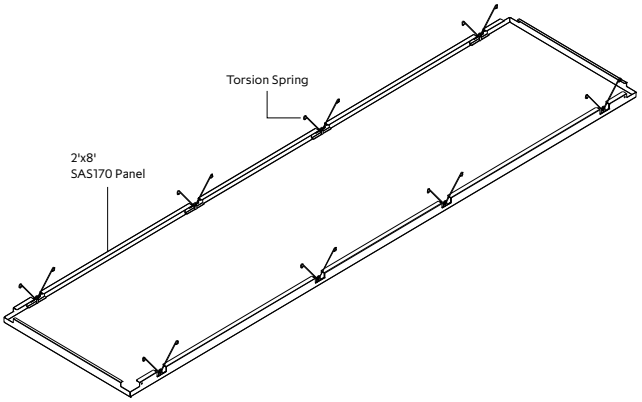
SAS170
SYSTEM DATASHEET

SAS170 Torsion Spring Ceiling Panels - Lower Ceiling: Dye Sublimated Woodtones (Maple) 24" W x 96" L . Upper Ceiling: RAL PPC 9010 (Pure White) 48"W x 48"L

SYSTEM FEATURES

- Fully downward accessible torsion spring panels with concealed grid
- Interior non-seismic application only, installed on SAS 15/16" Tee Grid
- Standard and custom size panels*
- Adaptable for varied layout options, including wall to wall, clouds, sloped, and layered configurations
- Standard and custom perforation options, including ultra micro perforation and parametrically designed patterns
- Notable acoustical performance, see page 7 for more info
- Full integration with third party lighting, diffusers, sprinklers, speakers, etc.
- Matching perimeter trim options for full and field-cut panels
- Class A fire rating - steel & alum material options



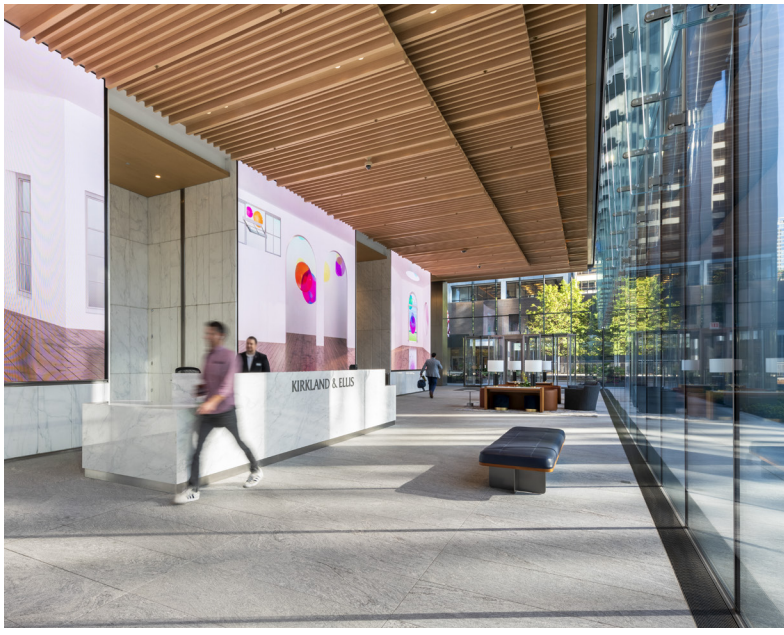
***Please ask your sales rep for more information**

CONTACT US
WWW.SASINT.US
FOR CUSTOMIZATIONS
AND PURCHASING

WELL LEED USGBC BREEAM SKA Rating

WoodTones

POPULAR DYE SUBLIMATED WOOD FINISHES



BIOPHILIC & IEQ

SAS wood finishes seamlessly blend the tranquility of nature into interior spaces, nurturing a connection with the outdoors that uplifts occupant well-being.

For more options contact your sales rep.

Anodic Finishes

POPULAR FINISHES

The Anodic collection offers metallic finishes, emulating anodized aluminum look.

Steel Blue Gray	Steel Blue Platinum	Black	Anodic Ice	Soft Silver	Soft Champagne
Golden Beach	Gold Pearl	Gold Splendour	Steel Bronze	Steel Bronze 2	Anodic Bronze

FOR MORE OPTIONS PLEASE CONTACT YOUR SALES REP.

RAL/ PPC Finishes

RAL / PPC FINISHES

Telegrey 7047	Jet Black 9005	Signal White 9003	Signal Red 3001	Signal Green 6032	Traffic White 9016
Pure White 9010	Telegrey 7047	White Aluminum 9006	Grey Aluminum 9007		

RAL Color Matching allows for seamless integration into your design palette, ensuring a perfect match with your chosen color scheme.

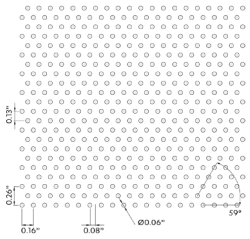
Recognized internationally for its precision, it offers a comprehensive range of hues, allowing architects to bring their unique visions to life.

IEQ: OUR LIGHTER RAL PAINTED FINISHES WITH HIGH LIGHT REFLECTANCE AMPLIFY NATURAL LIGHTING, REDUCING ENERGY USE WHILE BOOSTING MOOD AND PRODUCTIVITY.

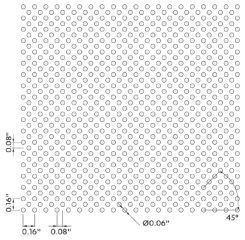
Perforations

POPULAR PATTERNS SHOWN

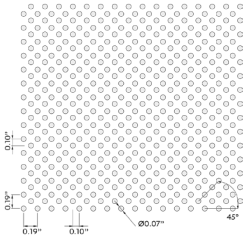
Other standard and custom patterns are available



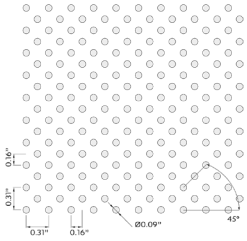
D1513



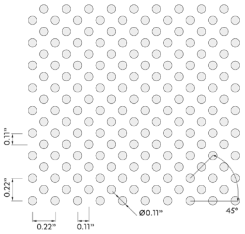
D1522



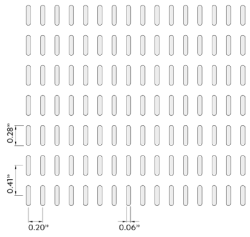
D1821



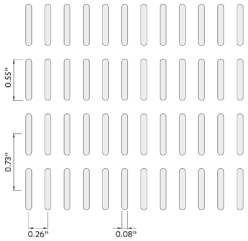
D2414



D3022



OB19



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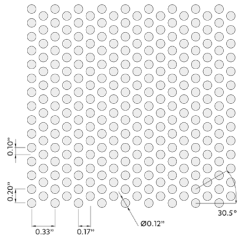
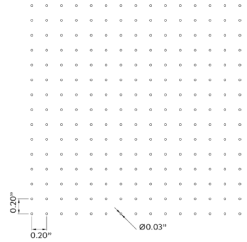
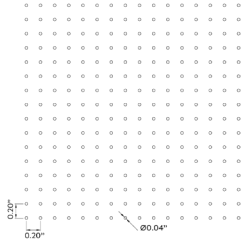


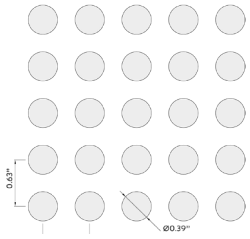
D3136



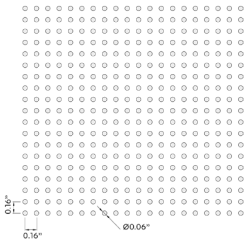
S0702 Ultramicro



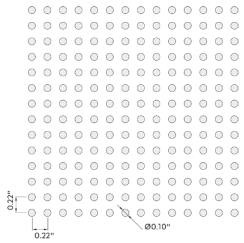
S1003 Ultramicro



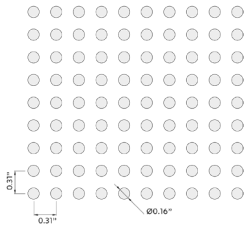
S1030



S1612



S2516

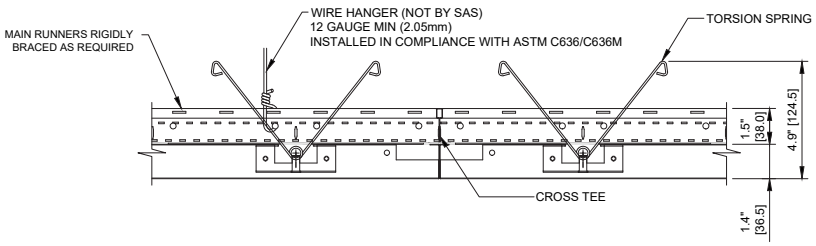


S3920

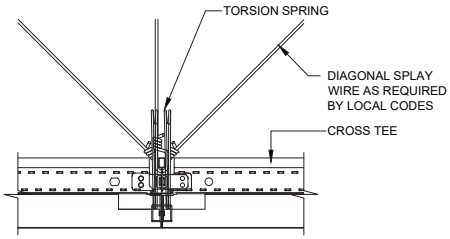
Perforation Codes:
D1513
D = Diagonal S Square
15 = Diameter
05 = Open Area

PLEASE VISIT SAS.US WEBSITE FOR MORE STANDARD FINISHES.
SAS USA PROVIDES PARAMETRIC PERFORATION DESIGNS. PLEASE CONTACT YOUR SALES REP FOR ALL CUSTOM PERFORATION INQUIRIES.

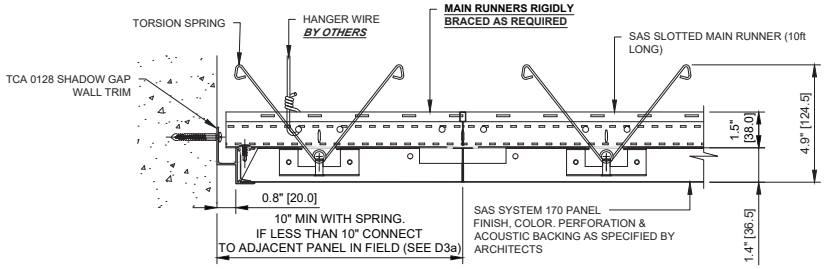
SAS170 System Details



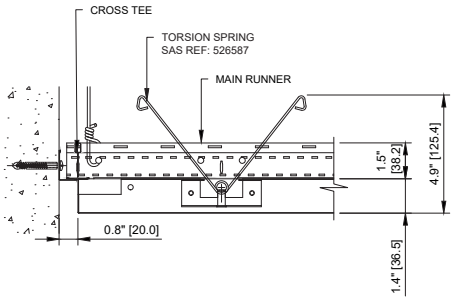
1. PANEL JOINT DETAIL @ MAIN RUNNER



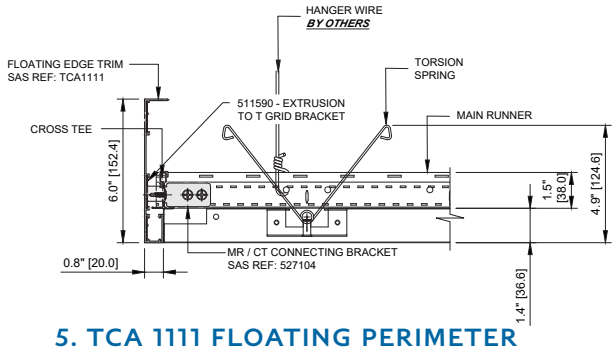
2. PANEL JOINT DETAIL @ CROSS TEE



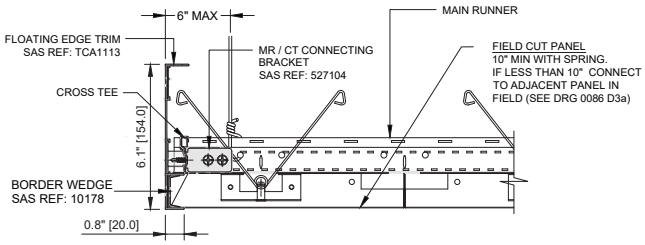
3. PERIMETER WALL DETAIL CUT PANEL @ MAIN RUNNER



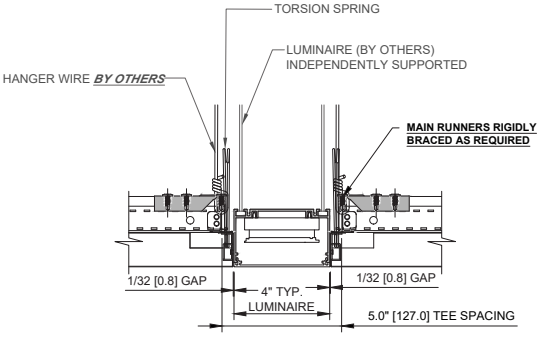
4. PERIMETER WALL DETAIL FULL PANEL @ MAIN RUNNER



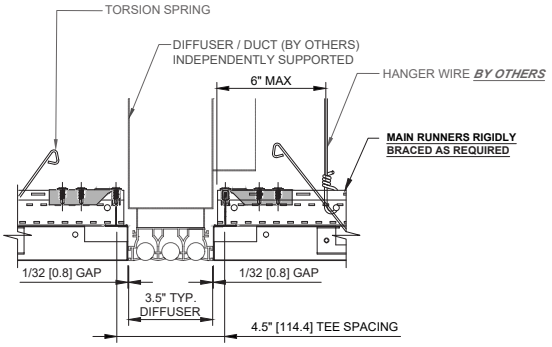
5. TCA 1111 FLOATING PERIMETER FULL PANEL @ MAIN RUNNER



6. TCA 1113 FLOATING PERIMETER CUT PANEL @ MAIN RUNNER



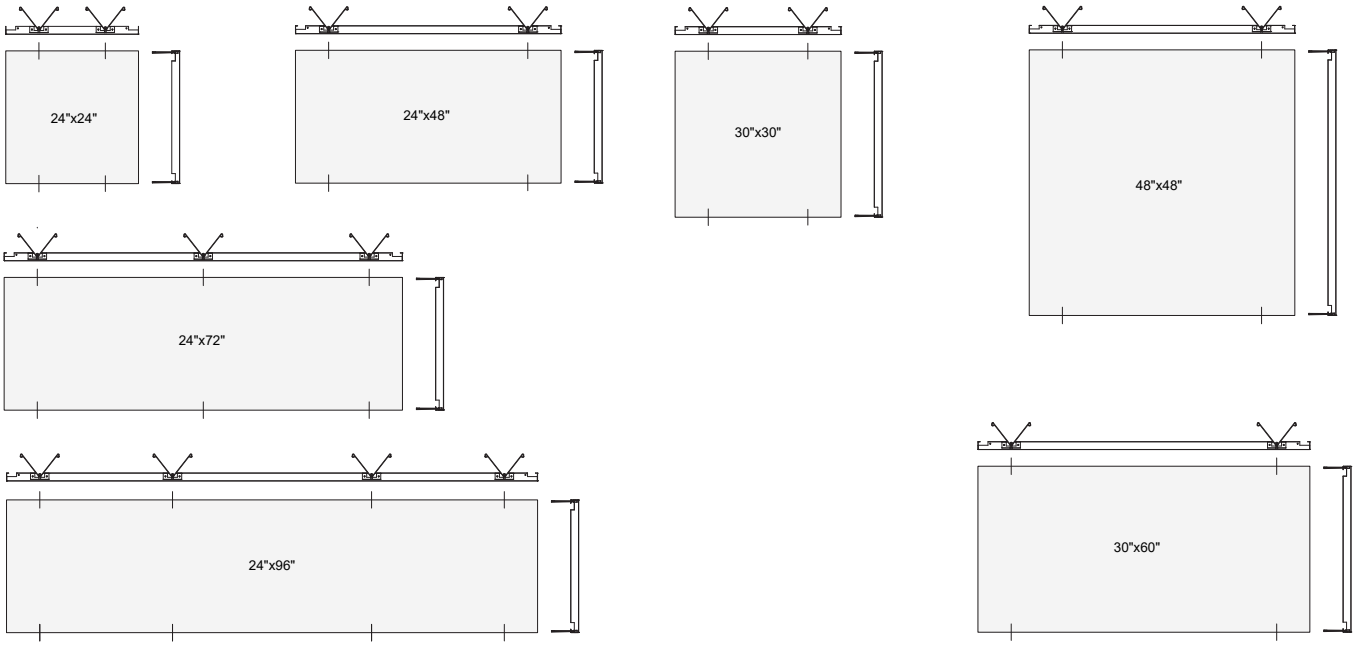
7. TYPICAL LINEAR LIGHTING INTEGRATION



8. TYPICAL LINEAR DIFFUSER INTEGRATION

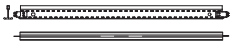
STANDARD PANEL SIZES

Available in Steel & Aluminum (Torsion Springs Supplied Loose)

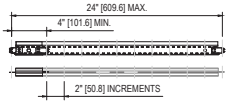


SYSTEM COMPONENTS

MAIN RUNNER (SLOTTED): 387930

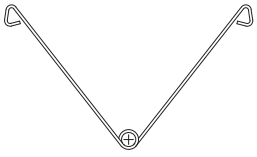


2ft CROSS TEE (PLAIN): 437394

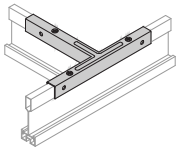


NON STANDARD CROSS TEES

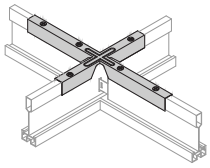
CROSS TEE LENGTH AVAILALE IN 2" [50.8] INCREMENTS FROM 4" [101.6] TO 24" [609.6]
(FOR NON-STANDARD SIZES ABOVE 24" CONTACT TECHNICAL)



TORSION SPRING - (SUPPLIED LOOSE)
ITEM No: 526587



DB3 CONNECTOR BRACKET
ITEM No: 21567

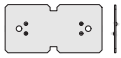


DB4 CONNECTOR BRACKET
ITEM No: 125045

SYS170 ACCESS TOOL
ITEM No: 502645

WIRE HANGER
(NOT BY SAS)
12 GAUGE MIN (2.05mm)
INSTALLED IN COMPLIANCE WITH ASTM C636/C636M

CORNER SPLICE
Item No: 10536
To Suit 34.8mm Keyway



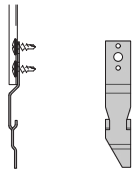
STRAIGHT SPLICE
Item No: 10534
To Suit 34.8mm Keyway

T-GRID CONNECTOR
Item No: 527104

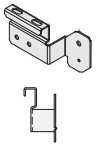
Border Wedge
Item No: 10178

Barbed Spring Clip
Item No: 11981

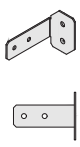
TCA 0128
Shadow gap channel trim
Item No: 10548



TCB 08
Extrusion To Emac Hanger
Item No: 10530



Bracket for TCA 1111
T-Grid to extrusion bracket
Item No: 511590



Bracket for TCA 1112 & 1113
T-Grid to extrusion bracket
Item No: 511485

TCA 1111
Floating edge perimeter trim for full panels
(See D1/D2 drawing 0887)
Item No: 520511

TCA 1112
Floating edge perimeter trim for combination
of full & field cut panels
(See D1/D2 drawing 0905)
Item No: 511050

TCA 1113
Floating edge perimeter trim for cut panels only
(See D3/D4 drawing 0905)
Item No: 511051

TECHNICAL PERFORMANCE

Reaction to Fire

ASTM E84/UL273 & CAN/ULC S102:2018

Class A (Plain and perforated tiles with acoustic backing)
Flame spread 10, Smoke development 5 (Plain and perforated tiles with polyester powder coated finish)
Flame spread 15, Smoke development 10 (Perforated tiles with acoustic backing)

Acoustics

Note SAS170 can accept an acoustic inlay up to a maximum of 16mm thick as standard. Thicker pads are available, please contact technical for further information.

PERFORATION	INLAY	ABSORPTION			ATTENUATION		
		α_ω	NRC	CLASS	$D_{n,c,w}$	$D_{n,f,w}$	R_w
Plain	None	–	–	–	43dB	–	–
Ultramicro (S1003, S0702)	Fleece	0.65	0.65	C	18dB	–	–
	16mm 80kg/m3 Pad	0.90	0.90	A	33dB	–	9dB
S1511	Fleece	0.80	0.80	B	–	–	–
	16mm 80kg/m3 Pad	0.90	0.85	A	–	–	–
D1522 / S1820	Fleece	0.80	0.80	B	–	15dB	–
	16mm 80kg/m3 Pad	1.00	1.00	A	27dB	–	–
	16mm 80kg/m3 Pad + Backing Plate	0.65	0.70	C	41dB	–	23dB

Light Reflectance

Up to 86.07%
(for RAL 9016 plain tiles, further information is available upon request)

Warranty

25 years

System Weight

1.425 lbs/SF
Steel 24"x24" panels plus 4 TS Bracket and 4 Torsion Springs

0.66 lbs/SF
Alum 24"x24" panels plus 4 TS Bracket and 4 Torsion Springs

MATERIAL HEALTH

VOCs

<0.5 µg/m^3 (tested in accordance with Indoor Comfort Gold and California Department of public health standards)

Formaldehyde Class

E1 in accordance with BS EN 13964:2014

REACH / LBC Red List

Product contains no substances on the authorisation, restriction or candidate list found on the current REACH SYHC or LBC Red List to 0.1% or 100ppm

Cradle to Cradle Material Health Certification

Yes (PPC finish up to 39% perforation and 16mm acoustic pad)

SUSTAINABILITY

Environmental Product Declaration

Product Specific Type III Environmental Product Declaration to EN 15804:2012+a1 2013

Embodied Carbon

20.0 - 22.4kg/CO2/m^2 of steel tiles including sub-grid and bracket (figures based on plain or perforated steel tiles with and without acoustic backing)

Recycled Content

SAS Horizon Steel - Recycled content = 23% Post consumer & 77% Pre consumer
SAS Horizon Alum - Recycled content = 44% Post consumer & 56% Pre consumer

PLEASE ASK YOUR SALES REP FOR MORE INFORMATION