SECTION 09 54 00

SPECIALTY CEILING AND FEATURE WALL SYSTEMS

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\*\* NOTE TO SPECIFIER \*\* Sculptform; Click-On Battens, Screens, Cladding, Walls, Ceilings.
This specification is based on products from Timber and Curved Timber based on the products of Sculptform, which is located at:
19615 Russell Rd
Kent, WA 98032
Tel: 206-347-4003
Email: support@sculptform.com
Web: <https://sculptform.com>
[Click Here] for additional information.
The Click-On Batten System consists of Mounting Tracks and connectors using Clip/Spring Connections and Click-on Battens of Aluminum or Timber in various profiles and finishes including curved walls and ceilings including Custom Design Solutions achieve the design intent of the Architect.
The mounting track/batten assembly is mounted to various substrates or third-party framing systems provided by others, and requires the framing system designer to incorporate factors such as wind loading, bracing, seismic, building movement and other relevant standards to the overall design. Our Click-on Batten system is a highly customizable, proprietary acoustic batten system. Famous for the unique patented clip connection, our Click-on Battens make installation fast and easy using either timber or aluminum battens in a range of sizes and profiles.
A specially designed groove in the back of each batten serves as the interface between the batten and clip. The clips are provided pre-fixed to mounting tracks that are quickly installed on-site before the battens are clicked into place.
Our patented Click-on connection produces a solid click when the battens engage with the mounting track clips and results in a fast installation with completely concealed fixings. Clips are factory fitted and pre-spaced to a mounting track, with a variety available to suit your application's substrate. The flexibility of our system allows for hatches and even hidden doors to be detailed without disturbing the linear textures of the feature wall or ceiling. The ends of battens are also covered, with a range of trims to suit.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Click-on ceiling battens.
		2. Click-on wall battens.
		3. Click-on free standing screens.
		4. Click-on office divider screens.
		5. Click-on balustrade infill screens.
		6. Click-on staircase barrier screens.
		7. Click-on facade screens.
		8. Click-on screens.
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 06 11 00 - Wood Framing.
		2. Section 09 53 23 - Metal Ceiling Suspension Assemblies.
		3. Section 09 22.16 - Drywall Framing Assemblies.
		4. Section 09 29 00 - Gypsum Drywall.
		5. Section 21 13 00 - Sprinkler heads in Ceiling System.
		6. Section 23 37 00 - Air Outlets and Inlets.
		7. Section 26 51 00 - Interior Lighting.
		8. Section 07 46 43 - Rainscreen Cladding for Facades and Soffits.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. AS/NZS 1530.1 1004 - Methods for fire tests on building materials, components and structures.
		2. AS 2796.2 2006 - Timber Hardwood Sawn and milled products.
		3. AS/NZS 4600: 2018 Cold-formed steel structures.
		4. ASTM A240 Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
		5. ASTM B86-08 Standard Specification for Zinc and Zinc-Aluminum (ZA) Alloy Foundry and Die Castings.
		6. ASTM B117-19 Standard Practice for Operating Salt Spray (Fog) Apparatus.
		7. ASTM B308/B308M-20 - Standard Specification for Aluminum-Alloy 6061-T6.
		8. ASTM B580-79(2019) - Standard Specification for Anodic Oxide Coatings on Aluminum.
		9. ASTM E84 (R2016) - Standard Test Method for Surface Burning Characteristics of Building Materials.
		10. (CBC) California Building Code 2022
		11. (IBC) International Building Code 2021
		12. ASCE 7-16 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures.
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data: Manufacturer's data sheets on each product to be used, including:
			1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Installation methods.
		3. Test Reports: Upon request submit certified test reports from recognized test laboratories.
		4. Certificates: Submit manufacturer's certificate that products meet or exceed specified requirements.
		5. Shop Drawings: Submit shop drawings in detail of all work in scale to indicate size, location and attachment methods required for the installation of the required work.

\*\* NOTE TO SPECIFIER \*\* Delete if no exposed surfaces or finishes.

* + 1. Verification Samples: Submit samples or portions of full size units showing colors, finish, jointing and methods of internal fastening as well as all other detailing required.
	1. QUALITY ASSURANCE
		1. Manufacturer: The manufacturer shall have a minimum of three years' experience in fabricating aluminum and solid wood ceiling and feature wall systems to fire retardant substrates and shall have completed at least five projects of the scope and quality required by this project.
			1. The manufacturer shall have tested the installation of the system to the substrate without showing signs of detachment, cracking or irregularities.
			2. The manufacturer shall have complete installation drawings and instructions to ensure a quality installation.
		2. Installer Qualifications: Minimum 2 year experience installing projects of similar size and complexity.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
			1. Finish mock-up areas designated by the Architect.
			2. Do not proceed with remaining work until workmanship is approved by Architect.
			3. Refinish mock-up area as required to produce acceptable work.
	1. PRE-INSTALLATION MEETINGS
		1. Convene minimum two weeks prior to starting work of this section. The meeting shall include the installer of the Specialty Ceiling and Feature Wall System, the installer of the celling and bulkhead support system(s), the manufacturer's representative of the feature wall and ceiling system, and the Architect.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Delivery: Deliver material in the manufacturer's original, unopened, undamaged containers with identification labels intact. Protect system components from excessive moisture in shipment, storage, and handling.
		2. Provide labels indicating brand name, source of procurement, style, size and thickness. Deliver in unopened bundles and store in a dry place with adequate air circulation. Do not deliver material to building until wet conditions such as concrete, plaster, paint, and adhesives have been completed and cured to a condition of equilibrium
		3. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
		4. Handling: Handle materials to avoid damage.
	3. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
	4. SEQUENCING
		1. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
	5. WARRANTY
		1. Warranty Period: One year.
			1. Manufacturer's shall warrant that the materials furnished hereunder will be free of manufacturing defects for a period of one year. The warranty may be conditioned with a statement that damage resulting from wet job conditions, faulty construction, plumbing or ventilating systems is not covered by the warranty. The manufacturer's warranty is limited to replacement of defective material only and faulty installation shall be corrected by the installing contractor. The warranty required herein is the sole remedy against the manufacturer and there are no other implied warranties. In any event, the manufacturer shall not be liable for incidentals or consequential damages.

\*\* NOTE TO SPECIFIER \*\* Delete the following paragraph if not required.

* 1. EXTRA MATERIALS

\*\* NOTE TO SPECIFIER \*\* Insert percentage. Define percentage of different components if required.

* + 1. Extra Materials: Provide \_\_\_ percent for use by owner in building maintenance and repair.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Sculptform, which is located at:19615 Russell RdKent, WA 98032Tel: 206-347-4003Email: [request info (bradley.s@sculptform.com)](https://arcat.com/rfi?action=email&company=Sculptform&message=RE%253A%2520Spec%2520Question%2520(09545scu)%253A%2520&coid=54068&spec=09545scu&rep=&fax=);Web: <https://sculptform.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Calculated from AS 4600 Section 8.3 Prototype Testing. From report: 21-10136840 Bureau Veritas. 22/01/2021. Note that top cross rail ceiling suspension supports are not included in this specification and must be provided by others with design consideration for seismic bracing. Select the components required and delete those not required.

* 1. SYSTEM CORE COMPONENTS
		1. Clip/Spring Connection System.
			1. Size: 50 mm W by 15 mm H.
			2. Material: Zamak EZDA 3 (Zinc Alloy 3) (ASTM AG40A), ASTM B86-08.
			3. Clip Coating: ALZIN ESP-SF Clear.
			4. Spring: CNC bent Stainless Steel Plate 304. (ASTM A240).
			5. Salt Fog Resistance: Salt Fog Resistance ASTM B117, Performance Rating: 3/8 vs C. interpreted from AS 1247-2004. (Some white corrosion present).
		2. Mounting Tracks.
			1. Properties General:
				1. Grade Extruded Aluminum ASTM B308, 6106 / T6.
				2. Coating: Dulux Electro Black Ace: 9069116F, AS 3715 Powder Coating. Thickness: 60 microns.
				3. Shear Modulus: 26,000 MPa.
				4. Poisson's Ratio (v): 0.33.
				5. Compressive Modulus of Elasticity (E): 70,000 MPa.
				6. Co-Efficient of Linear Expansion \_\_\_\_\_\_\_\_\_\_.
				7. Material Tested was 45 x 17 mm Profiled Aluminum Mounting track. Meets ASTM E84-21 Class A with a Flame Spread of 5 and Smoke Developed 55.

\*\* NOTE TO SPECIFIER \*\* Select the track and sizes required and delete those not required. Coordinate the locations of each on the Drawing

* + - 1. Track:
				1. 45 x 25 Std Track: 0.000023 C-1:

Section Area: 199.8 sq mm.

Weight per Linear Meter: 0.540 kg/linear meter.

* + - * 1. 25 x 25 Slim Line Track.

Section Area: 190.4 mm2.

Weight per Linear Meter: 0.514 kg/linear meter

* + - * 1. 45 x 32 Ceiling Track.

Section Area: 183.33mm2.

Weight per Linear Meter: 0.495 kg/linear meter.

\*\* NOTE TO SPECIFIER \*\* Click-on Battens are a concealed fix linear feature battening system for acoustic walls and ceilings. The system is crafted from profiled timber or aluminum battens and mounting tracks with factory fitted clips and acoustic backing. Our Click-on Batten system is a highly customizable, proprietary acoustic batten system. Famous for the unique patented clip connection makes installation fast and easy using either timber or aluminum battens in a range of sizes and profiles. See the manufacturer' literature for additional details and SYSTEM COMPONENTS DESIGN LOADS

* 1. CLICK-ON BATTENS

\*\* NOTE TO SPECIFIER \*\* Select the Click-on Battens for Wall and Ceiling Applications required and delete those not required. Coordinate the locations of each on the Drawing. Click-on battens for ceilings have been successfully tested for seismic loads in California in accordance with 2022 CBC, 2021 IBC and ANSC-7. Contact the Manufacturer for additional information. Note that suspended direct fix ceiling (joist) mounting track ceiling systems are not provided by Sculptform and structural loading and seismic design considerations must be determined by the suspended ceiling provider or engineer to ensure compliance. Select the Ceiling and Wall backing requirements as required and delete those not required.

* + 1. General: Structural Calculations for Click-On Batten Ceiling Attachment to resist seismic loads in the state of California. These calculations were done in accordance with the 2022 CBC, the 2021 IBC and the ASCE 7-16. The ceiling tracks were attached to the main ceiling runners with Sculptform clips at a maximum 24 inch OC for wood battens and at a maximum 48 inch OC for aluminum battens.
		2. Ceiling Application:
			1. Suspended Ceiling with integrated Mounting Track mounted to Standard Suspended Ceiling System provided by others
			2. Ceiling with Direct Fix (Joist) Mounting Track provided by others.
			3. Ceiling Mounting Track, Connector Clips, Feature Batten, Acoustic Backing, Optional Acoustic Batts.
		3. Exterior and Interior feature wall backing requirements:
			1. Typical Interior / Exterior Stud Wall: Maximum 600 mm stud on center. Standard Mounting Track Interior: 600 mm oc, Aluminum 1200 mm oc. Optional Acoustic Batts between studs. PET Interior Acoustic backing behind battens. Feature Batten Facing
			2. Typical Curved / Stud Wall: Standard Studs Substrate with Flex bottom and top track, Curved plywood or similar backing. Curved Mounting track 600 mm oc, Aluminum 1200 mm oc. Base Skirting. Feature Batten Facing.
			3. Fire Walls must meet the requirements of the local building code.
		4. Click-on Aluminum Batten Profiles: Extruded Aluminum ASTM B308, 6160 / T6.

\*\* NOTE TO SPECIFIER \*\* The weight of the ceiling batten system can vary significantly, depending on batten material, size and spacing. To determine the weight (kg/m2) of your custom design, see Sculptform's Technical Information data.
\*\* NOTE TO SPECIFIER \*\* Click-on Battens are available in Aluminum and Timber. Select the profile, sizes, material and finish required and delete those not required. Coordinate the locations of each on the Drawing.

* + - 1. Profiles:
				1. 25 mm x 50 mm Block, Weight 0.57 kg/lm.
				2. 30 mm x 30 mm Block, Weight 0.449 kg/lm.
				3. 30 mm x 60 mm Block, Weight 0.677 kg/lm.
				4. 40 mm x 20 mm Block, Weight 0.466 kg/lm.
				5. 50 mm x 50 mm Block, Weight 0.747 kg/lm.
				6. 120 mm x 20 mm Block, Weight 1.138 kg/lm.
				7. 25 mm x 100 mm Block, Weight 1.063 kg/lm.
				8. 30 mm x 30 mm Dome, Weight 0.434 kg/lm.
				9. 30 mm x 30 mm Flute, Weight 0.636 kg/lm.
			2. Wood Finish Aluminum (Olefin Embossed Film). Meets requirements of ASTM E84. Contact the manufacturer for addition information.
				1. Northern Spotted Gum 13.09 percent.
				2. Grey Gum 24.46 percent.
				3. Charred Ash 5.88 percent.
				4. Coffs Blackbutt 23.79 percent.
				5. American Oak 33.82 percent.
				6. Australian Ash 36.39 percent.
			3. Powder Coated Aluminum Finish (Thermoset Polyester) Color as selected by the Architect. Meets ASTM E83 Class A: Flame Spread: 0, Smoke Developed 0.
				1. Matt 21 to 45 at 60 degrees.
				2. Satin 46 to 75 at 60 degrees.
				3. Gloss: Greater than 76 at 60 degrees.
			4. D3020 Fluromax High gloss Flurocarbon powder coating. Color as selected by the Architect. Fire Properties AS 1530.1-1994: Deemed not combustible under AS 1530.1-1994.
			5. Anodized Finish ASTM B 580. Color as selected by the Architect.
		1. Timber Batten Profiles:

\*\* NOTE TO SPECIFIER \*\* Select the profile and size(s) required and delete those not required required and delete those not required.

* + - 1. Block:
				1. 30x19 mm.
				2. 40x19 mm.
				3. 60x19 mm.
				4. 30x30 mm.
				5. 22x40 mm.
				6. 22x40 mm.
				7. 40x40 mm.
				8. 30x60 mm.
			2. Dome:
				1. 30x19 mm.
				2. 30x30 mm.
				3. 40x30 mm.
				4. 60x30 mm.
				5. 22x40 mm.
				6. 30x40 mm.
				7. 30x60 mm.
			3. Flute:
				1. 30x19 mm.
				2. 40x19 mm.
				3. 60x19 mm.
				4. 30x30 mm.

\*\* NOTE TO SPECIFIER \*\* Select the Timber Batten Species required and delete those not required. Timber Batten Species:

* + - 1. Spotted Gum (ACGH3 Treated). For use in Interior and exterior locations. Meets ASTM E84 Class B with a Flame Spread of 30 and Smoke Developed 100.
				1. Grading AS 2796.2 as 67 percent Select Grade, 33 percent Medium Feature Grade.
				2. Moulding Specifications AS 2796.1 Section 7 Dressed Boards, Joinery and Mouldings.
				3. Moisture Content 9 percent to 14 percent (AS/NZS 1010.1; AS/NZS 2796.1)
				4. Average Density (12 percent EMC) 990kg/m3.
				5. Hardness (Janka) kN 11.
				6. Unit Tangential Movement 6.1 percent.
				7. BCA C1.10a Group 3.
				8. Durability Rating: Class 1 - Greater than 40 years.
				9. Usage: Interior / Exterior.
			2. Australian Ash for interior locations: Meets ASTM E84 Class A with a Flame Spread of 15 and Smoke Developed 125.
				1. Grading AS 2796.2 as 67 percent Select Grade, 33 percent Medium Feature Grade.
				2. Moulding Specifications AS 2796.1 Section 7 Dressed Boards, Joinery and Mouldings.
				3. Moisture Content 9 percent to 14 percent (AS/NZS 1010.1; AS/NZS 2796.1).
				4. Average Density (12 percent EMC) 650 kg/m3 .
				5. Hardness (Janka) kN 5.0 .
				6. Unit Tangential Movement 8.5 percent.
				7. BCA C1.10a Group 3.
				8. Durability Rating Class 3-7, to 15 years.
				9. Usage: Interior Only.
			3. American Oak for interior locations: ASTM E84-21 Class B with a Flame Spread of 75 and Smoke Developed 110.
				1. Grading AS 2796.2 as 67 percent Select Grade, 33 percent Medium Feature Grade.
				2. Moulding Specifications AS 2796.1 Section 7 Dressed Boards, Joinery and Mouldings.
				3. Moisture Content 9 percent to 14 percent (AS/NZS 1010.1; AS/NZS 2796.1).
				4. Average Density (12 percent EMC) 705 kg/m3.
				5. Hardness (Janka) kN 5.73.
				6. Unit Tangential Movement 6.6 percent.
				7. BCA C1.10a Group 3.
				8. Durability Rating Class 3 - 7 to 15 years.
				9. Usage: Interior Only.
			4. Timber Batten Finish:

\*\* NOTE TO SPECIFIER \*\* Select the finish required from the following paragraphs and delete those not required. E84 Fire Tests for Test for Surface Burning Characteristics of Building Materials are available for these finishes over multiple Wood Species. Contact the manufacturer for additional information.

* + - * 1. MiroTone: Waterbased lacquer, 2 coats for interior application. Coating thickness 72 - 82.
				2. Waterbased Wood Cream, I coat for interior application. Coating thickness 60-80g/sqm.
				3. Intergrain Enviropro: Waterbased Lacquer for exterior applications. Two coats, coating Thickness 83-93 u.
				4. Cutek Extreme: Stabelizer, one coat for exterior application. Coating thickness 10-20 sq m per liter.

\*\* NOTE TO SPECIFIER \*\* Steam Bent Timber: Our curved timber can achieve a huge range of looks to meet almost any design intent. Not every profile in our standard range is available for steam bending due to profile and size constraints. The species chosen can also make a difference to the profiles available. Refer to the steam bending parameters table below to confirm. Select the Profile(s), Species and finish required from the following paragraphs and delete those not required.

* + 1. Steam Bent Timber Batten:
			1. Profiles:
				1. Block:

30x19 mm.

40x19 mm.

60x19 mm.

30x30 mm (not available in Spotted Gum).

* + - * 1. Dome:

30x30 mm.

30x19 mm (not available in Spotted Gum).

* + - * 1. Species American Oak/Finish:

Clear Oil.

Clear Poly.

Clear Rubio.

* + - * 1. Species Spotted Gum/Finish:

Clear Oil.

Clear Poly.

Clear Rubio.

\*\*Note to Specifier\*\* Each radius requires specialized equipment (formers) in order to produce the curved timber battens. Concave means "hollowed out or rounded inward" and is easily remembered because these surfaces "cave" in. The opposite is convex meaning "curved or rounded outward." Select the Curve direction(s) and Radii(s) required and delete those not required. To save on costs, we offer a range of radii as standard. Any custom radius within the parameters can be achieved, contact us to discuss your specific project requirements.

* + - 1. American Oak:
				1. Profile/Size: Block 30 x 19 mm.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 300 mm.

Min. Inner Radius (Convex): 300 mm.

Max. Radii at 90 degrees: 1000 mm.

* + - * 1. Profile/Size: Block 40 x 19 mm.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 300 mm.

Min. Inner Radius (Convex): 300 mm.

Max. Radii at 90 degrees: 1000 mm.

* + - * 1. Profile/Size: Block 60x19 mm.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 300 mm.

Min. Inner Radius (Convex): 300 mm.

Max. Radii at 90 degrees: 1000 mm.

* + - * 1. Dome 30x19 mm - Dome has subtle flat spot on top due to the nature of the steam bending process.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 300 mm.

Min. Inner Radius (Convex): 300 mm.

Max. Radii at 90 degrees: 1000 mm.

* + - * 1. Block 30x30 mm.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 500 mm.

Min. Inner Radius (Convex): 500 mm.

Max. Radii at 90 degrees: 1000 mm.

* + - * 1. Dome 30x30 mm: Dome has subtle flat spot on top due to the nature of the steam bending process.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 500 mm.

Min. Inner Radius (Convex): 500 mm.

Max. Radii at 90 degrees: 1000 mm.

* + - 1. Spotted Gum:
				1. Profile/Size: Block 30 x 19 mm.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 700 mm.

Min. Inner Radius (Convex): 700 mm.

Max. Radii at 90 degrees: 1000 mm.

* + - * 1. Dome 30x19 mm - Dome has subtle flat spot on top due to the nature of the steam bending process.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 700 mm.

* + - * 1. Profile/Size: Block 40 x 19 mm.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 700 mm.

Min. Inner Radius (Convex): 700 mm.

Max. Radii at 90 degrees: 1000 mm.

* + - * 1. Profile/Size: Block 60 x 19 mm.

Max. Angle: 90 degrees.

Min, Inner Radius (Concave): 700 mm.

Min. Inner Radius (Convex): 700 mm.

Max. Radii at 90 degrees: 1000 mm.

\*\* NOTE TO SPECIFIER \*\* While steam bent timber lessens the number of joins required for a curved application, some joints are still required. Select the joint type required and delete the one not required.

Aligned Joints: Provide with aligned joints to maintain the join line throughout the wall or ceiling, ensuring consistency.

Staggering the joins in the curved timber can lessen the disruption to the aesthetic, making it a perfect option for a ' seamless' look. 2 - 3 alternating curved battens are supplied, allowing the joins to be located at different locations which helps to blend the join line.

Our curved timber process limits the lengths of timber achievable. The maximum length achievable is 1800 mm., where the minimum length is 1000 mm.. This can be trimmed on-site to suit requirements.

* + - 1. Joints:
				1. Aligned Joints: Provide with aligned joints to maintain the join line throughout the wall or ceiling, ensuring consistency.
				2. Staggered Joints: Provide with Staggered Joints.

\*\*Note to Specifier\*\* Our curved timber process limits the lengths of timber achievable. The maximum length achievable is 1800 mm., where the minimum length is 1000 mm.. This can be trimmed on-site to suit requirements.

* + - 1. Bulkhead and Ceiling to Wall Transitions: Provide as indicated on the Drawings. Coordinate with other trades for Ply Form Radius Supports and suspended ceiling supports (Not Provided by Sculptform).

\*\*Note to Specifier\*\* Kerfing is the process of cutting small notches in the back of the timber batten to allow it to curve. Our kerfed battens are provided to site straight but flexible to allow for fixing to curved forms on-site. The process of curving timber through kerfing is not suitable for all the timber profiles. The range below has been tested and will perform well when kerfed. Select Kerfed battens profiles, species and finish required. Delete if not required.

* + 1. Kerfed Curved Timber Battens:
			1. Block Profiles:
				1. 20. x19 mm.
				2. 40. x 19 mm.
				3. 60. x 19 mm.
			2. Spotted Gum Species and Coating:
				1. Clear oil Clear Oil.
				2. Intergrain Ultraclear.
				3. Intergrain Light Oak.
				4. Clear Poly.
				5. Clear Rubio.
				6. Natural Rubio.
				7. Whitewash Rubio.
				8. Pale Grey Rubio.
				9. Creamy White Rubio.
				10. Weathered Silver Rubio.
				11. Greywash Rubio.
				12. Olive Rubio.
				13. Beige Rubio.
				14. Chocolate Rubio.
				15. Dark Grey Rubio.
				16. Mid Black Rubio.
			3. American Oak Species and Coating:
				1. Raw.
				2. Clear Rubio.
				3. Natural Rubio.
				4. Whitewash Rubio.
				5. Creamy White Rubio.
				6. Weathered Silver Rubio.
				7. Greywash Rubio.
				8. Olive Rubio.
				9. Beige Rubio.
				10. Pale Gray Rubio.
				11. Chocolate Rubio.
				12. Dark Grey Rubio.
				13. Mid Black Rubio.
			4. Vic Ash Species and Coating:
				1. Raw.
				2. Clear Rubio.
				3. Natural Rubio.
				4. Whitewash Rubio.
				5. Creamy White Rubio.
				6. Weathered Silver Rubio.
				7. Greywash Rubio.
				8. Olive Rubio.
				9. Beige Rubio.
				10. Mid Black Rubio.
			5. Timber (Wood) Finish: Joining Kerfed Battens:
				1. MiroTone: Waterbased lacquer, 2 coats for interior application. Coating thickness 72 - 82 mm.
				2. Rubio Waterbased Wood Cream, I coat for interior application. Coating thickness 60-80g/sqm.
				3. Intergrain Enviropro: Waterbased Lacquer for exterior applications. Two coats, coating Thickness 83-93u.
				4. Cutek Extreme: Stabelizer, one coat for exterior application. Coating thickness 10-20m2/litre
			6. Joining Kerfed Battens:
				1. Stiff aluminum joiners are supplied to bridge between two battens at the butt joints. This will stop the battens tendency to tent or peak at the butt joints.
				2. Clip Options: Our kerfed timber integrates with our timber Click-on Battens system and uses our patented clip connections. The two most common methods of fixing the battens are:
				3. Standard track system, using mounting tracks with prefixed clips to hold the battens in place.
				4. Direct fix clips to ply forms, which are attached to the substrate and form the shape of the curve. This method is useful for complex applications.
				5. We recommend 5mm to 10 mm. to limit visibility of kerfing behind the battens,
				6. Minimum bending radius (inner). Minimum inner radius that can be formed by kerfing is 1.5 meters.
				7. Coordinate with other trades for curved Metal Stud Frame support for kerfed battens.
		2. Exterior and Interior Backing Requirements:
			1. Typical Interior / Exterior Stud Wall: Maximum 600 mm stud on center. Standard Mounting Track Interior: 600 mm. oc, Aluminum 1200 mm. oc. Optional Acoustic Batts between studs. PET Interior Acoustic backing behind battens. Feature Batten Facing
			2. Typical Curved / Stud Wall: Standard Studs Substrate with Flex bottom and top track, Curved plywood or similar backing. Curved Mounting track 600 mm. oc, Aluminum 1200 mm. oc. Base Skirting. Feature Batten Facing.
			3. Fire Walls must meet the requirements of the local building code.

\*\* NOTE TO SPECIFIER \*\* Select One or both of the following paragraphs if required.

* + 1. Ceiling Access Hatches:
			1. Pivot Hatch: Pivot hatches are supplied as a kit and assembled on site. Please consider:
				1. Clearance is required for upward movement. Allow 200 mm. clearance above the panel.
				2. Typically 1-3mm gap in the batten ends.
				3. Length options available are 600 mm. and 1200 mm.
				4. Battens can be cut to any width on site up to 1200 mm. Beyond 1200 mm, consult Sculptform directly.
			2. Drop-in Hatch: The drop-in hatch is the simplest solution to providing access. Please consider:
				1. This hatch type is built on site at the locations required.
				2. Drop-in hatches can be built any size up to 1200x1200 mm.
				3. Stainless spring is removed on last clip.
				4. NOTE TO SPECIFIER \*\* Select the Accessories required and delete those not required
		2. Accessories: Provide with the following accessories as required.
			1. Matching end caps for Aluminum Battens.
			2. Matching Hidden Door where indicated.
			3. Ceiling Fixture Supports for lighting where indicated.
			4. Coordinate with Sprinkler heads in ceiling system.
		3. Polyester (PET) Acoustic Backing.
			1. Material: PET (50 percent Recycled) thermally bonded
				1. NRC per ASTM C423:

0.2 (Direct fix).

0.5 (when using a 25 mm air cavity).

* + - * 1. Thickness: 7 mm.
				2. Weave: Needle punched, non-woven.
				3. Surface Density: 1.4 kg/m2.
				4. Density: 1.25 kg/m2.
				5. Fire Resistance: AS ISO 9705:2003 Classification Group 1.
				6. SMOGRArc Less than 0.6m2/s2 in accordance with ISO 9705:2003 (R2016).
				7. Ref. Branz Test Report: FI13078-002. Issued: 14/10/2020.
			1. Mounting Method:
				1. Adhesive as recommended by the Manufacturer.
				2. Mounting Method: Direct attachment.
				3. 25mm - 120 mm., Direct Pullout Capacity Fx 50 kg.

\*\* NOTE TO SPECIFIER \*\* The following paragraph includes data for Click-on Screens. Click-on Screens have been meticulously designed to provide a clean, linear, 360-degree screening product. The open batten system can be crafted from either timber or aluminum as a balustrade infill or free-standing screen.

* 1. CLICK-ON SCREENS

\*\* NOTE TO SPECIFIER \*\* Click-on Screens consist of mounting tracks, clips and timber or aluminum battens. The clip base comes factory fitted to the mounting track at the specified spacing. The Click-on connection features a button fixed to the back or ends of the batten, which clicks securely into engagement in the clip base. Site variation and building and thermal movement are factored into the design, with the top bracket fixed into place and lower brackets able to slide. The rail design makes for easy fixing to any substrate while giving the installer up to 10 mm. of in/out adjustment. Select the Type(s) of Click-on screens required and delete those not required.

* + 1. Types:
			1. Free standing screens.
			2. Office dividers.
			3. Balustrade infills.
			4. Staircase barriers.
			5. Facade screens.

\*\* NOTE TO SPECIFIER \*\* Select the features required and delete those not required.

* + 1. Timber Click-on Screens:
			1. Profiles and Sizes:
				1. 30x60 mm.
				2. 30x80 mm.
				3. 30x130 mm.
			2. Spotted Gum / Finish:
				1. Raw.
				2. Clear Oil.
				3. Clear Poly.
				4. Intergrain Ultraclear.
				5. Intergrain Light Oak.
			3. American Oak / Finish:
				1. Raw.
				2. Clear Oil.
				3. Clear Poly.
				4. Intergrain Ultraclear.
				5. Intergrain Light Oak.
			4. Australian Ash / Finish:
				1. Raw.
				2. Clear Oil.
				3. Clear Poly.
				4. Intergrain Ultraclear.
				5. Intergrain Light Oak.
			5. Spacing:
				1. Profile: 30x60 mm.

30 mm.

50 mm.

80 mm.

* + - * 1. Profile: 30x80 mm.

50 mm.

80 mm.

110 mm.

* + - * 1. Profile: 30x130 mm.

80 mm.

100 mm.

130 mm.

* + - * 1. Space Gap:

Minimum 26 mm.

Maximum 120 mm.

* + - 1. Maximum Batten Span for Interior Applications:
				1. Spotted Gum / 1.5.
				2. Australian Ash / 3 m.
				3. American Oak / 1.5 m.
			2. Mounting Options:
				1. Back Mounted.
				2. End Mounted.
				3. Combination Back/End.
			3. Clip Types:
				1. Back Mount Fixed: Back when using the Back Mount Method a 20 mm. clear gap is required above or below the batten to enable installation and removal of the battens.
				2. Back Mount Float: Back Mount Floating clip is only designed to take up to +- 5mm for installation and thermal movement. Not suitable for building movement. All mounting tracks to be fixed to a continuous frame that eliminates building movement. If your screen is a slab to slab application, or building movement is expected, refer to the End Mount floating clip.
				3. End Mount Fixed: End Mount floating clip can take up to +- 25mm of Building movement if installed with a 25 mm gap under the batten.
			4. Mounting Track Types and Substrate Fixings
				1. Split Track - 45x25mm: Used in straight applications for both back mount and end mount. Designed to span up to 1200 mm. between balustrade posts. Track has pull out adjustment from 25-35 mm, to allow onsite packing.
				2. Slim Track - 45x5mm: Default end mount track, designed to be slim to the floor and ceiling. Used for back mount curves down to a 600 mm. Radius. Fixing of this track must be through the center of the clip casting.
				3. Direct Fix: Where no track is desired for both back mount and end mount. Complex site specific spacing. Sculptform does not take responsibility for the clip to substrate connection. Screw not supplied by Sculptform. Suitable fixing needs to be considered by the installer. M5 or 10g countersunk screw is most suitable.
				4. Mid Support Threaded Rod: For applications requiring a large distance between clips, a threaded rod and spacer system can be used as an extra fixing point. The rod runs through pre-drilled holes and uses spacer sleeves to help prevent movement and keep the battens straight.
			5. Removability:
				1. The removal tool has two prongs that when slid into the clip connection, disengage the spring and release the batten. For back mount, the batten will need 20 mm. of space above to lift and remove.
		1. Steam Bent Timber Batten Profiles.
			1. Block:
				1. 20x19mm.
				2. 40x19 mm.
				3. 60x19mm.
				4. 30x30 mm (not available in Spotted Gum).
			2. Dome:
				1. 30x30 mm.
				2. 30x19mm (not available in Spotted Gum).
			3. Species American Oak:
				1. Finish:

Clear Oil.

Clear Poly.

Clear Rubio.

* + - 1. Species Spotted Gum:
				1. Finish:

Clear Oil.

Clear Poly.

Clear Rubio.

\*\*Note to Specifier\*\* Concave means "hollowed out or rounded inward" and is easily remembered because these surfaces "cave" in. The opposite is convex meaning "curved or rounded outward." Select the Curve direction(s) and Radii(s) required and delete those not required. Each radius requires specialized equipment (formers) in order to produce the curved timber battens. To save on costs, we offer a range of radii as standard. Any custom radius within the parameters can be achieved, contact us to discuss your specific project requirements.

* + 1. American Oak:
			1. Profile/Size: Block 30x19 mm.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 300 mm.
				3. Min. Inner Radius (Convex): 300 mm.
				4. Max. Radii at 90 degrees: 1000 mm.
			2. Profile/Size: Block 40x19 mm.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 300 mm.
				3. Min. Inner Radius (Convex): 300 mm.
				4. Max. Radii at 90 degrees: 1000 mm.
			3. Profile/Size: Block 60x19 mm.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 300 mm.
				3. Min. Inner Radius (Convex): 300 mm.
				4. Max. Radii at 90 degrees: 1000 mm.
			4. Dome 30x19 mm - Dome has subtle flat spot on top due to the nature of the steam bending process.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 300 mm.
				3. Min. Inner Radius (Convex): 300 mm.
				4. Max. Radii at 90 degrees: 1000 mm.
			5. Block 30x30 mm.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 500 mm.
				3. Min. Inner Radius (Convex): 500 mm.
				4. Max. Radii at 90 degrees: 1000 mm.
			6. Dome 30x30 mm.: Dome has subtle flat spot on top due to the nature of the steam bending process.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 500 mm.
				3. Min. Inner Radius (Convex): 500 mm.
				4. Max. Radii at 90 degrees: 1000 mm.
		2. Spotted Gum:
			1. Profile/Size: Block 30x19 mm.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 700 mm.
				3. Min. Inner Radius (Convex): 700 mm.
				4. Max. Radii at 90 degrees: 1000 mm.
			2. Dome 30x19 mm - Dome has subtle flat spot on top due to the nature of the steam bending process.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 700 mm.
			3. Profile/Size: Block 40x19 mm.
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 700 mm.
				3. Min. Inner Radius (Convex): 700 mm.
				4. Max. Radii at 90 degrees: 1000 mm.
			4. Profile/Size: Block 60x19 mm:
				1. Max. Angle: 90 degrees.
				2. Min, Inner Radius (Concave): 700 mm.
				3. Min. Inner Radius (Convex): 700 mm.
				4. Max. Radii at 90 degrees: 1000 mm.

\*\* NOTE TO SPECIFIER \*\* While steam bent timber lessens the number of joins required for a curved application, some joints are still required. Select the joint type required and delete the one not required.

* + - * 1. Aligned Joints: Provide with aligned joints to maintain the join line throughout the wall or ceiling, ensuring consistency.
				2. Staggering the joins in the curved timber can lessen the disruption to the aesthetic, making it a perfect option for a ' seamless' look. 2 - 3 alternating curved battens are supplied, allowing the joins to be located at different locations which helps to blend the join line.
			1. Aligned Joints: Provide with aligned joints to maintain the join line throughout the wall or ceiling, ensuring consistency.
			2. Staggered Joints: Provide with Staggered Joints.

\*\*Note to Specifier\*\* Our curved timber process limits the lengths of timber achievable. The maximum length achievable is 1800 mm., where the minimum length is 1000 mm.. This can be trimmed on-site to suit requirements.

* + - 1. Bulkhead and Ceiling to Wall Transitions: Provide as indicated on the Drawings. Coordinate with other trades for Ply Form Radius Supports and suspended ceiling supports (Not Provided by Sculptform).

\*\*Note to Specifier\*\* Kerfing is the process of cutting small notches in the back of the timber batten to allow it to curve. Our kerfed battens are provided to site straight but flexible to allow for fixing to curved forms on-site. The process of curving timber through kerfing is not suitable for all the timber profiles. The range below has been tested and will perform well when kerfed. Select Kirfed battens, Species and finish required. Delete if not required.

* 1. Kirfed Curved Timber Battens:
		1. Block Profiles:
			1. 20 x19 mm.
			2. 40 x 19 mm.
			3. 60 x 19 mm.
		2. Spotted Gum Species and Coating:
			1. Clear oil Clear Oil.
			2. Intergrain Ultraclear.
			3. Intergrain Light Oak.
			4. Clear Poly.
			5. Clear Rubio.
			6. Natural Rubio.
			7. Whitewash Rubio.
			8. Pale Grey Rubio.
			9. Creamy White Rubio.
			10. Weathered Silver Rubio.
			11. Greywash Rubio.
			12. Olive Rubio.
			13. Beige Rubio.
			14. Chocolate Rubio.
			15. Dark Grey Rubio.
			16. Mid Black Rubio.
		3. American Oak Species and Coating:
			1. Raw.
			2. Clear Rubio.
			3. Natural Rubio.
			4. Whitewash Rubio.
			5. Creamy White Rubio.
			6. Weathered Silver Rubio.
			7. Greywash Rubio.
			8. Olive Rubio.
			9. Beige Rubio..
			10. Pale Gray Rubio
			11. Chocolate Rubio.
			12. Dark Grey Rubio.
			13. Mid Black Rubio.
		4. Vic Ash Species and Coating:
			1. Raw.
			2. Clear Rubio.
			3. Natural Rubio.
			4. Whitewash Rubio.
			5. Creamy White Rubio.
			6. Weathered Silver Rubio.
			7. Greywash Rubio.
			8. Olive Rubio.
			9. Beige Rubio.
			10. Mid Black Rubio.

\*\* NOTE TO SPECIFIER \*\* Select the Wood Species required and delete those not required.

* + 1. Wood Species:
			1. Spotted Gum (ACGH3 Treated). For use in Interior and exterior locations:
				1. Grading AS 2796.2 as 67 percent Select Grade, 33 percent Medium Feature Grade.
				2. Moulding Specifications AS 2796.1 Section 7 Dressed Boards, Joinery and Mouldings.
				3. Moisture Content 9 to 14 percent (AS/NZS 1010.1; AS/NZS 2796.1)
				4. Average Density (12 percent EMC) 990 kg/m3.
				5. Hardness (Janka) kN 11.
				6. Unit Tangential Movement 6.1 percent.
				7. BCA C1.10a Group 3.
				8. Durability Rating: Class 1 - Greater than 40 years.
				9. Usage: Interior / Exterior.
			2. Australian Ash for interior locations:
				1. Grading AS 2796.2 as 67 Select Grade, 33 percent Medium Feature Grade.
				2. Moulding Specifications AS 2796.1 Section 7 Dressed Boards, Joinery and Mouldings.
				3. Moisture Content 9 to 14 percent (AS/NZS 1010.1; AS/NZS 2796.1)
				4. Average Density (12 percent EMC) 650 kg/m3..
				5. Hardness (Janka) kN 5.0.
				6. Unit Tangential Movement 8.5 percent.
				7. BCA C1.10a Group 3.
				8. Durability Rating Class 3 - 7 to 15 years.
				9. Usage: Interior Only.
			3. American Oak for interior locations:
				1. Grading AS 2796.2 as 67 percent Select Grade, 33 percent Medium Feature Grade.
				2. Moulding Specifications AS 2796.1 Section 7 Dressed Boards, Joinery and Mouldings.
				3. Moisture Content 9 to 14 percent (AS/NZS 1010.1; AS/NZS 2796.1).
				4. Average Density (12 percent EMC) 705 kg/m3.
				5. Hardness (Janka) kN 5.73.
				6. Unit Tangential Movement 6.6 percent.
				7. BCA C1.10a Group 3.
				8. Durability Rating Class 3 - 7 to 15 years.
				9. Usage: Interior Only.
		2. Timber (Wood) Finish:

\*\* NOTE TO SPECIFIER \*\* Select the Wood finish required and delete those not required.

* + - 1. MiroTone: Waterbased lacquer, 2 coats for interior application. Coating thickness 72 - 82.
			2. Rubio Waterbased Wood Cream, I coat for interior application. Coating thickness 60-80g/sqm.
			3. Intergrain Enviropro: Waterbased Lacquer for exterior applications. Two coats, coating Thickness 83-93u.
			4. Cutek Extreme: Stabilizer, one coat for exterior application. Coating thickness 10-20m2/litre.
		1. Joining Kerfed Battens:

\*\* NOTE TO SPECIFIER \*\* Select the Wood finish required and delete those not required.

* + - 1. Stiff aluminum joiners are supplied to bridge between two battens at the butt joints. This will stop the battens tendency to tent or peak at the butt joints.
			2. Clip Options: Our kerfed timber integrates with our timber Click-on Battens system and uses our patented clip connections. The two most common methods of fixing the battens are:
				1. Standard track system, using mounting tracks with prefixed clips to hold the battens in place.
				2. Direct fix clips to ply forms, which are attached to the substrate and form the shape of the curve. This method is useful for complex applications.
				3. Ply Form / Track Spans.
			3. Space between battens:
				1. We recommend 5mm to 10mm to limit visibility of kerfing behind the battens.
			4. Minimum bending radius (inner). Minimum inner radius that can be formed by kerfing is 1.5 meters.
			5. Coordinated with other trades for curved Metal Stud Frame support for kerfed battens.

\*\* NOTE TO SPECIFIER \*\* Select the Accessories required and delete those not required

* + 1. Accessories:
			1. Provide with the following accessories as required.
				1. Matching end caps for Aluminum Battens.
				2. Matching Drop-in Hatches ceilings were indicated.
				3. Matching Pivot Hatches for walls and ceilings were indicated.
				4. Matching Hidden Door where indicated.
				5. Ceiling Fixture Supports for lighting where indicated.
				6. Sprinkler heads in ceiling system.
1. EXECUTION
	1. EXAMINATION
		1. Prior to the installation, the installing contractor shall be completely familiar with the manufacturer's instructions for storage, job conditions and the installation recommendations, and that they are strictly followed.
		2. Work shall not begin until the installation location is fully enclosed and glazed.
		3. All wet work is to be completed and dried out to the satisfaction of the Architect.
		4. Temperature shall be at least 65 degrees Fahrenheit during the installation and thereafter.
		5. The installation contractor shall be responsible for the examination of all of the conditions and recommendations as set forth and shall not proceed until satisfactory conditions have been met.
	2. INSTALLATION
		1. Installation shall be in strict accordance with the manufacturer's written recommendations, project specifications and the contract drawings. Installation shall be performed by trained crews under the direction of a trained foreman. Finished appearance in all cases shall be in exact conformance with the Contract Documents.
		2. Cutouts for lights and sprinkler systems should be approved by manufacturer.
		3. Metal top rail ceiling suspension systems shall be installed as specified in Section 09 53 23 to comply with ASTM C636/C636M and seismic design requirements indicated, according to suspension system manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
		4. Sculptform Suspension Core components and battens shall be installed in strict compliance with the specialty ceiling manufacturers written instructions.
	3. CLEANING
		1. Clean exposed surfaces of ceiling panel to comply with manufacturer's instructions.
		2. Remove and replace parts which cannot be successfully cleaned and repaired to permanently eliminate evidence of damage to the complete satisfaction of the Architect.
		3. Clean exposed aluminum with non-solvent based non-abrasive cleaning solution. Comply with manufacturer's instructions for cleaning components. Remove any components that cannot be effectively cleaned or repaired.
	4. PROTECTION
		1. Protect installed work from damage due to subsequent construction activity, including temperature and humidity limitations and dust control until acceptance by the Owner.

END OF SECTION