



DATA SHEET: **NUVO™ Form TB** (Tech Band)

Tech Band / Service Panel System

Product Overview

Product Name: NuvoForm-TB

Product Type: Aluminum techband / service panel system for integrated ceiling services

Manufacturer: Nelson (Nelson Architectural Metals)

NuvoForm-TB is a formed aluminum techband / service panel system designed to conceal, organize, and integrate mechanical and electrical services within the ceiling plane. The system provides a continuous, linear aesthetic while accommodating:

- HVAC diffusers
- Life-safety devices (speakers, strobes, detectors)
- Fire sprinkler heads
- Other ceiling-mounted accessories and controls
- Lighting fixtures (linear, point, and specialty)

NuvoForm-TB is engineered to integrate seamlessly with a wide range of ceiling types, including:

- Mineral fiber tile ceilings
- Fabric and stretch ceilings
- Gypsum (drywall) ceilings
- Any other Specialty architectural ceiling systems
- Wood ceilings (veneer, solid, slat, or grille)

Panels can be:

- Direct-mounted to standard ceiling tee grid, or
- Supported by custom-formed carrier channels engineered and supplied by Nelson for project-specific layouts and conditions.

System Components

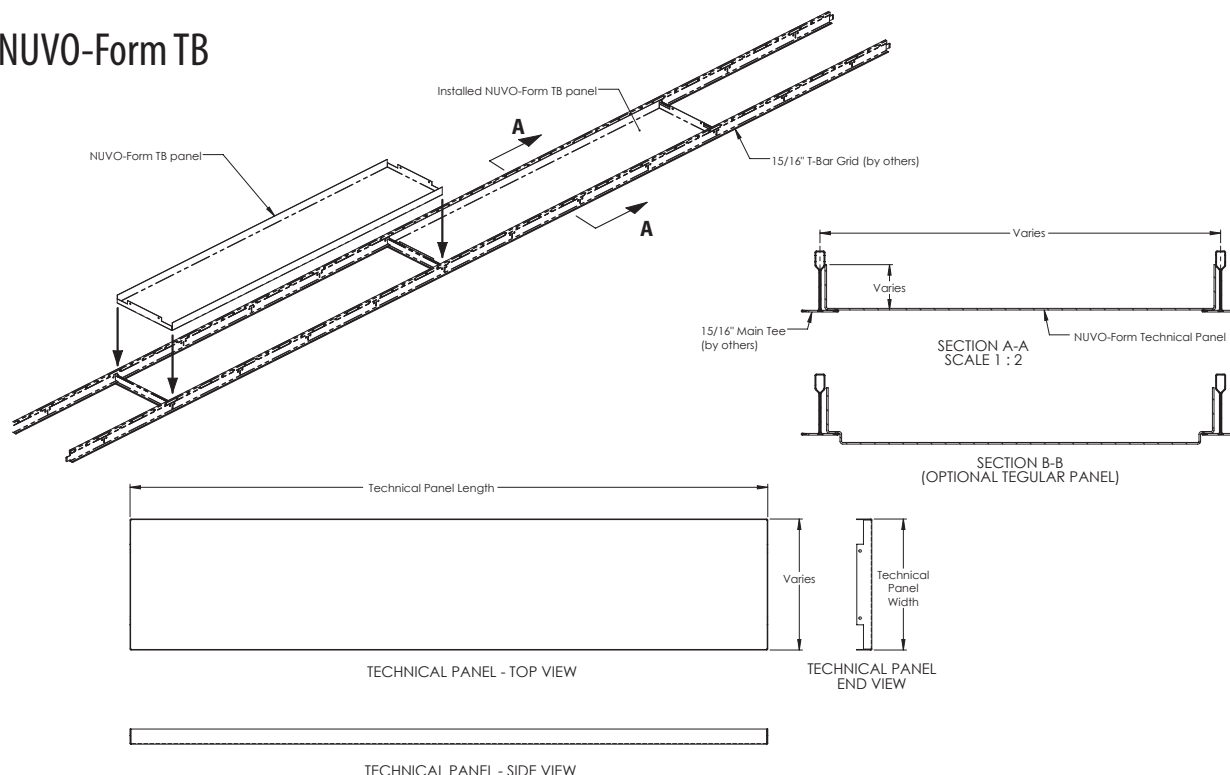
A typical NuvoForm-TB system includes:

1. Aluminum Techband / Service Panels
 - Linear panels, factory cut to length
 - Project-specific cutouts and reinforcements for devices (Optional Extra)
2. Support System
 - Direct-attach clips to standard T-grid (e.g., 9/16" or 15/16")
 - OR custom-formed carrier channels, hangers, and brackets designed by Nelson to suit project layout, loads, and interface conditions.
3. Trim & Transition Profiles
 - Edge trims for terminations at adjacent ceiling types
 - Transition profiles to mineral tile, drywall, wood, fabric, or other specialty ceilings
 - End caps, intersection components, and corner trims as required
4. Device Integration Hardware (As Required)
 - Mounting plates, adapter rings, reinforcements, and stiffeners
 - Coordination with diffuser, sprinkler, lighting, and device manufacturers' requirements

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NUVO-Form TB



Materials & Construction

- Base Material: Aluminum
- Alloy and temper: to be specified (e.g., 3000 or 5000 series; typical architectural grade)
- Thickness: project-specific, depending on span and loading requirements
- Fabrication:
 - Precision shearing, forming
 - CNC or Laser cutouts and perforations (where required)
 - Welded or mechanically fastened seams where applicable
- Support Components:
 - Aluminum or galvanized steel carrier channels and brackets, per structural requirements
 - Standard steel or aluminum tee grid by others where NuvoForm-TB is grid-mounted, unless otherwise noted

Dimensions (Typical – Project Specific)

NuvoForm-TB is custom-configured for each project. Typical ranges:

Panel Widths: Approx. 4" to 24" (100–600 mm)

Panel Lengths: Up to typical transportable lengths (e.g., 8'–10' / 2400–3048 mm)

Panel Depth / Return Heights: Coordinated to ceiling depth and device requirements

Note: Final dimensions to be confirmed via shop drawings and coordination with device layouts and structure.

Finishes Standard finish offerings (project-specific):

- Architectural powder coat (standard and custom colors)

Gloss level, color, and finish performance requirements (e.g., interior vs. exterior, cleanability) to be confirmed per project specifications. Color samples available upon request.

Integration & Compatibility

NuvoForm-TB is designed to coordinate with:

HVAC Diffusers: Linear slot diffusers, square / round diffusers, displacement diffusers (where suitable)

Sprinkler Heads: Concealed, semi-recessed, or exposed heads, with trim coordination and required clearances

Lighting: Recessed downlights, linear textures, continuous lines of light, sensors, and emergency textures

Note: Final dimensions to be confirmed via shop drawings and coordination with device layouts and structure.

Other Devices: Speakers, strobes, smoke detectors, cameras, access panels, and control devices



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Coordination Requirements

- Device schedules and cutout sizes to be provided by mechanical/electrical engineer and/or equipment suppliers
- Clearances and spacing around life-safety devices to comply with applicable codes and manufacturer instructions
- Fire, acoustic, and other system performance requirements to be defined in the project specifications
- Architectural powder coat (standard and custom colors)

Performance Considerations

NuvoForm-TB is a *service and aesthetic integration system* and is typically:

- Non-acoustic-rated unless combined with acoustic backers or surrounding systems that provide the required performance

For projects requiring specific performance (fire, acoustic, seismic, clean room, etc.), consult Nelson for appropriate detailing and documentation.

Specification Guide (Short-Form Sample)

Section 09 51 00 / 09 54 00 – Ceilings

NuvoForm-TB Techband / Service Panel System

- Manufacturer: Nelson
- Product: NuvoForm-TB Techband / Service Panel System
- Material: Aluminum panels and trims; carrier channels aluminum or galvanized steel as noted.
- Finish: [Architect to specify color, gloss, and system].
- Panel Size: [Width] x [Length] as indicated on drawings.

- Mounting: [Direct to tee grid] or [Custom Nelson carrier channel system].
- Integration: Provide factory cutouts and provisions for HVAC diffusers, sprinkler heads, lighting, and other devices as shown and scheduled.
- Submittals: Shop drawings, device coordination drawings, finish samples.

Ordering & Technical Support

For design assistance, technical support, or to develop a project-specific NuvoForm-TB layout and detail package, contact your local Nelson Representative

Standard References

- ASTM E84 - Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.
- AAMA 605.2 - Specification for High Performance Finishes.
- ASTM A 366/A 366M Standard Specification for Commercial Steel (CS) Sheet, Carbon (0.15 Maximum Percent) Cold-Rolled; 1997.
- ASTM A 666 Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2000.
- ASTM B36/B 36M Standard Specification for Brass Plate, Sheet, Strip, and Rolled Bar; 2006.
- ASTM B 209/B 209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2004.

DATA SHEET: **Stainless Steel & RAL Color System**

Architectural finishing with Stainless Steel and Powder Coat colors

Metal surfaces have an appeal of their own that few other materials can compare to but it is no match for the environment without proper surface treatment. Since Nelson is a turn-key operation; finishing is an important part of our manufacturing process. Finish quality is the first impression that everyone sees and maybe the most critical part of what makes architectural metals so attractive.

For Products that require a wet paint or powder coating, a five-stage washing system is used to remove any residual oils and properly prepare the surface for maximum coating adhesion. With large batch painting and powder coating booths and a 10 ton overhead crane, even very large coatings and fabrications can be accommodated.

With a broad customer base and a wide range of fabrication capabilities, we are able to provide any level of service desired, all of which are backed by our ISO 9001:2015 certified quality management system.

FINISHING Processes

Grinding, De-burring, Polishing, Wet Painting, Powder Painting & Plating

Stainless Steel Finishes

Stainless Steel finishes are available in a number of patterns. Standards: #2, #3, #4 & #8 Mirror (Many more options available)

Color: RAL

Nelson's Architectural Metals Division uses the RAL Universal Color System as the color guide for standard project colors. We also have the ability to match any existing color or create a specific color when needed.

For additional information about our custom finishing and assembly services, contact us directly.

JUPITER SILVER

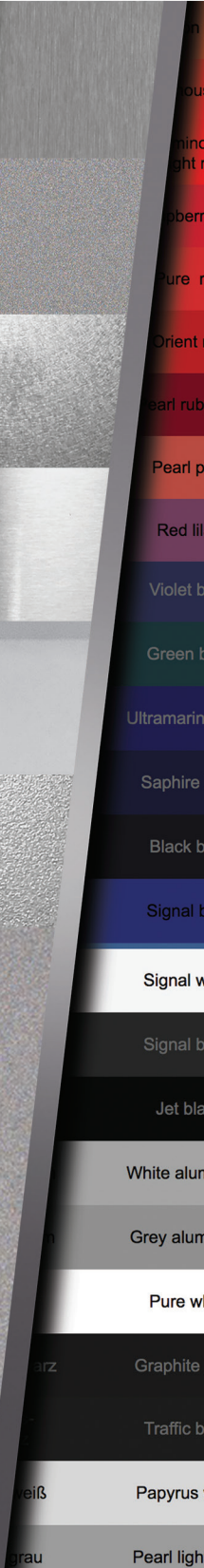
BRUSHED ALUMINUM

NON-DIRECTIONAL

SATIN BRUSH

#8 MIRROR

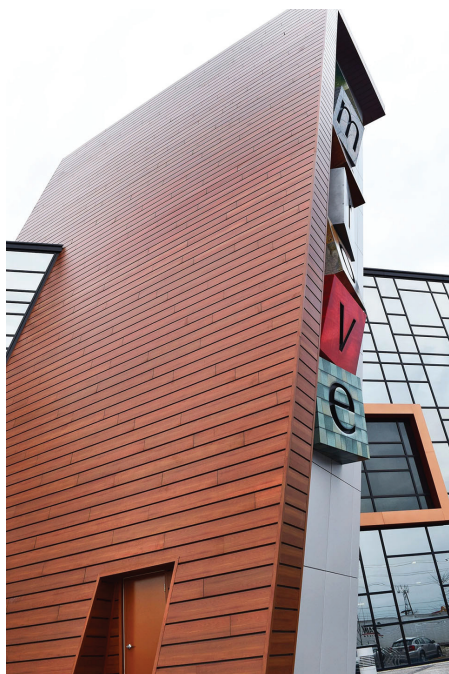
SANDSTONE



DATA SHEET: Ourborite | LUX Series *(sample Wood Finishes)*

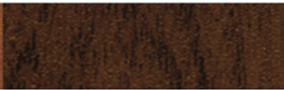
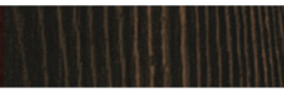
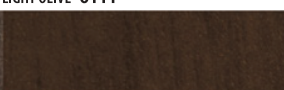
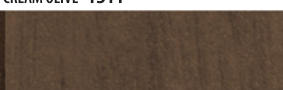
With powder coating and sublimated finishes

Nelson Industrial Inc. / Architectural Metals Division • 905.428.2240 • www.nelsonamd.com • info@nelsonamd.com



The Ourborite™ LUX Series features elevated aesthetics and durability with our new revolutionary powder coating and sublimated finishes. This advanced manufacturing process begins with the application of a specially formulated powder coating, known for its superior adherence and resilience. This eco-friendly coating is electrostatically applied and then cured under high heat, creating a hard, protective layer that is significantly more resistant to scratches, chipping, and fading compared to traditional paints. The series then introduces a specialized sublimation technique, transferring high quality wood designs onto powder-coated surfaces using intense heat and pressure. This process results in vivid, wood-like patterns that are seamlessly integrated into the coating, ensuring durability and colour vibrancy. These finishes are also formulated with UV resistant properties and can be cleaned easily.

SAMPLES SHOWN AS A GUIDE ONLY. FOR PROPER COLOUR DISPLAYED, REQUEST PRODUCT SAMPLES.

								
LIGHT CEDAR 0113			DARK PECAN 0214			LIGHT PECAN 0114		
								
RED OLIVE 0311			DARK ROSEWOOD 0210			LIGHT ROSEWOOD 0110		
								
DARK OLIVE 0211			LIGHT OLIVE 0111			CREAM OLIVE 1511		
								
LIGHT NATIONAL WALNUT 0106			DARK TABLE WALNUT 0205			LIGHT TABLE WALNUT 0105		
								
DARK ANTIQUE OAK 0208			LIGHT ANTIQUE OAK 0108			DARK FIR 0203		
								
DARK KNOTTY PINE 0207			LIGHT KNOTTY PINE 0107			DARK CHERRY 0202		
								
CREAM CHERRY 1502			WHITE CHERRY 0402			CANADIAN MAPLE 0415		
								
DARK BAMBOO 0209			LIGHT BAMBOO 0109			DARK ACACIA 0201		
								
DARK CEDAR 0213			CHARRED ROSEWOOD 0310			LIGHT ACACIA 0101		

DATA SHEET: Perforation Patterns

Popular Standards

Standard Patterns

SHAPE	DIRECTION	HOLE x CENTRE DIST.	CENTRE DIST.	OPEN AREA	ID-NUMBER
ROUND	STRAIGHT	1/16" x 0.2165"	0.2165"	6.6%	R1052
"	"	1/16" x 0.1894"	0.1894"	8.6%	R1032
"	"	1/16" x 0.1624"	0.1624"	11.6%	R1022
"	"	5/64" x 0.4332"	0.4332"	2.6%	R1092
"	"	5/64" x 0.2166"	0.2166"	10.2%	R1091
"	"	5/64" x 3/16"	0.1898"	13.4%	R1082A
"	"	3/32" x 0.3248"	0.3248"	6.6%	R1142
"	"	3/32" x 0.2706"	0.2706"	9.4%	R1132
"	"	1/8" x 0.4330"	0.4330"	6.5%	R1192
"	"	1/8" x 3/8"	0.3788"	8.6%	R1182
"	"	1/8" x 0.3248"	0.3248"	11.6%	R1172
"	"	3/16" x 0.6495"	0.6495"	6.6%	R1282
"	"	3/16" x 0.5413"	0.5413"	9.4%	R1272
"	"	3/16" x 0.4871"	0.4871"	11.6%	R1262
"	"	3/16" x 0.4330"	0.4330"	14.7%	R1252
"	"	1/4" x 0.8660"	0.8660"	6.6%	R1352
"	"	1/4" x 0.6495"	0.6495"	11.6%	R1342
"	"	1/4" x 0.5413"	0.5413"	16.8%	R1332
"	"	1/2" x 1.2990"	1.2990"	11.6%	R1462
"	"	1/2" x 1.0826"	1.0826"	16.8%	R1442

ROUND	STAGGERED	1/16" x 9/32"	0.2812"	4.5%	R1025
"	"	1/16" x 3/16"	0.1875"	10.1%	R1024
"	"	1/16" x 1/8"	0.1250"	22.7%	R1050
"	"	5/64" x 1/8"	0.1250"	35.3%	R1090
"	"	5/64" x 0.1096"	0.1096"	46.0%	R1080A
"	"	3/32" x 3/16"	0.1875"	22.7%	R1140
"	"	3/32" x 5/32"	0.1562"	32.7%	R1130
"	"	1/8" x 1/4"	0.2500"	22.7%	R1190
"	"	1/8" x 7/32"	0.2188"	29.6%	R1180
"	"	1/8" x 3/16"	0.1875"	40.3%	R1170
"	"	3/16" x 3/8"	0.3750"	22.7%	R1280
"	"	3/16" x 5/16"	0.3125"	32.7%	R1270
"	"	3/16" x 9/32"	0.2812"	40.3%	R1260
"	"	3/16" x 1/4"	0.2500"	51.0%	R1250
"	"	1/4" x 1/2"	0.5000"	22.7%	R1350
"	"	1/4" x 3/8"	0.3750"	40.3%	R1340
"	"	1/4" x 5/16"	0.3125"	58.0%	R1330
"	"	1/2" x 3/4"	0.7500"	40.3%	R1460
"	"	1/2" x 5/8"	0.6250"	58.0%	R1440

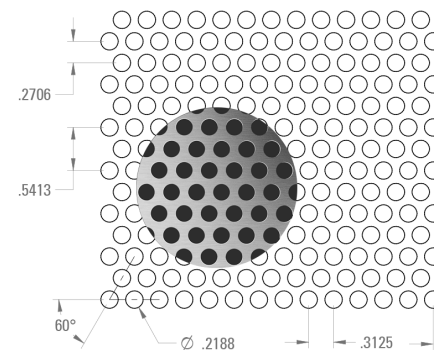
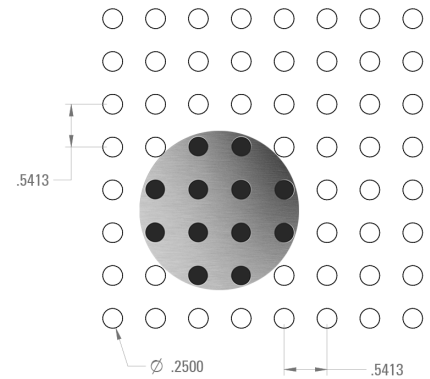
OPTIONS: Because of the large number of Perforation Patterns available, we have only shown the popular standard patterns here. If there are specific sizes and shapes required for your project, request matches from your AMD Representative to receive pattern selections available

MATERIALS

STEEL, STAINLESS STEEL,
ALUMINUM, GALVANIZED

ALLOY GRADE TYPE

Al 5052-H32, CRCQ, G90, HRCQ,



POPULAR PATTERNS

Shown in **BOLD FACE** text.