PART 1 GENERAL

1. RELATED DOCUMENTS
	1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
2. SUMMARY
	1. Section Includes:
		1. Non-perforated metal beams
		2. Fastening systems
		3. Accessories: provide other necessary items including devices for attachment overhead construction, floor, secondary members, splines, splices, connecting clips, and other devices required for a complete installation.
	2. Related Sections / Work:
		1. Sections 05 40 00 – Cold-Formed Metal Framing
		2. Sections 09 20 00 – Plaster and Gypsum Board
		3. Sections 09 50 00 – Acoustical Ceilings
		4. Sections 09 90 00 – Paintings and Coatings
		5. Division 23 – Heating, Ventilating and Air Conditioning
		6. Division 26 – Electrical
	3. Alternatives

1. Prior Approval: Unless otherwise provided for in the Contract documents, proposed product substitutions may be submitted no later than TEN (10) working days prior to the date established for receipt of bids. Acceptability of a proposed substitution is contingent upon the Architect's review of the proposal for acceptability and approved products will be set forth by the Addenda. If included in a Bid are substitute products that have not been approved by Addenda, the specified products shall be provided without additional compensation.

2. Submittals that do not provide adequate data for the product evaluation will not be considered. The proposed substitution must meet all requirements of this section, including but not necessarily limited to, the following: Single source materials suppliers (if specified in Section 1.5); Underwriters' Laboratories Classified Acoustical performance; Component design, size, composition, color, and finish; Suspension system component profiles and sizes; Compliance with the referenced standards.

1. REFERENCES
	1. American Society for Testing and Materials (ASTM)
		1. E 84 – "Standard Test Method for Surface Burning Characteristics of Building Materials"
		2. E 488 – "Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements"
		3. B 209 – "Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate"
		4. C 423 – "Sound Absorption and Sound Absorption Coefficients by Reverberation Room Method"
		5. E 580 – "Standard Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Moderate Seismic Restraint"
		6. C 635 – "Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings"
		7. C 636 – "Recommended Practice for Installation of Metal Ceiling Suspensions Systems for Acoustical and Lay-in Panels"
		8. A 641 – "Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire"
		9. A 653 – "Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip process"
		10. E 1264 – "Classification for Acoustical Ceiling Products"
		11. E 1477 – "Standard Test Method for Luminous Reflectance Factor of Acoustical Materials by use of Integrating-Sphere Reflectometers"
		12. D 1044 – "Practice for Abrasion Resistance"
		13. D 1002 – "Practice for Adhesion Resistance"

## System Description

## Fixed and operable ‘open / close’ vertical partitions

## SUBMITTALS

## Product Data: Manufacturer's published literature, including specifications.

1. Product Certification: Manufacturer's certifications that products comply with specified requirements and governing codes including product data, laboratory test reports and research reports showing compliance with specified standards.
2. Shop Drawings: Layout and details of acoustical ceilings show locations of items that are to be coordinated with or supported by the ceilings.
3. Samples for Verification: Full-size units (or as specified below) of each type of ceiling assembly indicated; in sets for each color, texture, and pattern specified, showing the full range of variations expected in these characteristics. Submit samples for each type specified.
	* 1. 6" long metal beam.
		2. 6" long samples of each suspension component.
4. QUALITY ASSURANCE
	1. Manufacturer/Installer Qualifications:
		1. Provide metal partition system components produced by a single manufacturer with experience in actual production of specified products and with resources to provide consistent quality in appearance and physical properties, without delaying the work.
		2. Provide attachment system components produced by a single manufacturer to provide compatible components for a complete metal ceiling system installation.
		3. Perform installations using a firm with installers having no less than 3 years of successful experience on projects of similar size and requirements.
	2. Regulatory Requirements:
		1. Fire Rating Performance Characteristics: Install system to provide a flame spread of 0 - 25, complying with certified testing to ASTM E 84.
		2. Structural Criteria: Install and certify system to comply with structural and wind load requirements of governing codes.
	3. Mock-Up: Prior to beginning installation erect a mock-up section, where directed, using all system components.
	4. Pre-installation Conference: Conduct a conference, prior to start of installation, to review system requirements, shop drawings, and all coordination needs.
5. DELIVERY, STORAGE AND HANDLING
	1. Deliver system components in manufacturer's original unopened packages, clearly labeled.
	2. Store components in fully enclosed dry space. Carefully place on skids, to prevent damage from moisture and other construction activities.
	3. Handle components to prevent damage to surfaces and edges, and to prevent distortion and other physical damage.
6. PROJECT CONDITIONS
	1. Begin system installations only after spaces are enclosed and weather-tight, and after all wet work and overhead work have been completed.
	2. Prior to starting installations, allow materials to reach ambient room temperature and humidity intended to be maintained for occupancy.
7. WARRANTY
	1. Provide specified manufacturer's warranty against defects in workmanship, discoloration, or other defect considered undesirable by the Architect or Employer.
	2. This warranty shall remain in effect for a minimum period of one (1) year from date of initial acceptance.
8. MAINTENANCE & EXTRA MATERIALS
	1. Maintenance Instructions: Provide manufacturer's standard maintenance and cleaning instructions for finishes provided.
	2. Extra Materials: Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels describing contents. Only typical system components are included with attic stock.
		1. Vertical Metal Beams: Full-size units equal to two percent (2%) of amount installed.
		2. Horizontal Metal Beams: Full-size units equal to two percent (2%) of amount installed.
		3. Attachment System Components: Quantity of fasteners and exposed component equal to two percent (2%) of amount installed.

1.9 LEED

A. Maxxit Metal Partitions qualify for the following credits:

 a. Category - Material & Resources

 i. MR Credit 2.1, 2.2 - Construction Waste Management Divert 50% or 75% from disposal

 ii. MR Credit 4.1, 4.2 - Recycled Content

 iii. MR Credit 5.1, 5.2 - Regional Materials (dependent on location)

LEED NC - 10% Extracted, Processed & Manufactured Regionally

LEED CI - 20% Manufactured Regionally

 b. Category - Indoor Environmental Quality

 i. EQ Credit 4.1 to 4.6 - Low-Emitting Materials

PART 2 PRODUCTS

1. MANUFACTURER
2. Protero™ Partition system manufactured by Maxxit Ceilings & Walls: 200 Admiral Blvd. Mississauga, ON L5T 2N6. Phone 905-206-9349.
3. Substitutions not permitted.
4. SYSTEM MATERIALS

Protero Partition system for interior installations providing factory supplied brackets and fasteners.

Beam Profiles – Aluminium extrusion

Dimensions

Standard:

* + - 1. 1-3/8” x 3-3/8”
			2. 1-1/2” x 6”
			3. 2” x 6”
			4. Up to 12’ long

Custom:

* + - 1. Beams up to 12’ long
			2. Lengths up to 12’ long
			3. Depths – custom sizes
			4. Widths – custom sizes

Spacing between beams determined by design

* + - 1. Partition Beams
				1. Partition Beams Type – Protero Partitions
			2. Color: ‘Standard’, ‘Color Matched’
			3. Size: Beam - Width, Depth, Length
			4. Flame Spread: ASTM E 1264; Class A (HPVA).
			5. Recycle Content: Post-Consumer - Pre-Consumer –
			6. Acceptable Product: Protero Partitions manufactured by Maxxit
	1. Attachment:
		1. Beams are inserted into base rails attached to the ceiling and floor
1. Base rails are mechanically formed aluminum with spaced openings to accept beams
2. Base rails are finished with aluminum end caps
3. Includes interior / hidden fastening brackets and screws
	1. Beam Finish:
		1. Paint; color to be selected by architect
			1. Powder Coat
			2. Decorated Wood-Look Powder Coat
		2. Vinyl Film
		3. Wood Veneer (non-perforated only)
		4. Stainless Steel
4. ACCESSORY MATERIALS
	1. End Caps: End caps to match beam finish

PART 3- EXECUTION

1. EXAMINATION
	1. Examine substrates and structural framing to which metal beams attach or abut, with installer present, for compliance with requirements specified in this and other Sections that affect installation and anchorage, and other conditions affecting performance of metal beam partition.
	2. Proceed with installation only after unsatisfactory conditions have been corrected.
2. PREPARATION
	1. Survey substrate for attachments to assure a smooth level surface for base rail installation.
3. INSTALLATION
	1. General: Install partition beams, per manufacturers shop drawings provided, per manufacturer's written instructions and to comply with publications referenced below.
		1. ClSCA "Ceiling Systems Handbook"
		2. IBC (International Building Code) Standard for Seismic Zone for local area
4. ADJUST AND CLEAN
	1. Adjust components to provide uniform tolerances.
	2. Replace all ceiling components that are scratched, dented or otherwise damaged.
	3. Clean exposed surfaces with non-solvent, non-abrasive commercial type cleaner.

**End of Section**