Guide Specification

PART 1 – GENERAL 09 50 00 - Ceilings

* 1. SUMMARY
1. All labor to fabricate and deliver the concealed suspended ceiling system along with “Linear Panels with Battens”, trims and required accessories
	1. RELATED WORK IN OTHER SECTIONS
2. Finished partitions, wall, and other ceiling structural elements
3. Integrated assembly including but not limited to lighting fixtures, speakers, electrical cables, and related connections
4. Mechanical and/or plumbing services, sprinklers, smoke detectors HVAC systems and related accessories
5. Surface paint finishes and any other acoustical elements outside of this scope
	1. REFERENCES
6. ASTM C423: Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
7. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials
8. CAN/ULC-S102-10: Standard Method of Test for Surface Burning Characteristics of building Materials and Assemblies
9. U.S. Green Building Council, LEED Building Design and Construction, Version 4.0
10. CISCA: Ceiling Systems Handbook
	1. MANUFACTURER QUALITY ASSURANCE
11. Manufacturer must have the capacity to manufacture the specified product to meet the qualified defined standard and quality for a period of not less than five years
12. Any product substitution request including the overall design, product performance, dimensional changes, mounting and finishes must be submitted to all stakeholders including the architect within 10 working days prior to the latest proposal due date
13. Dimensional tolerances and size variation of nominal 1/8” (3mm) will be expected due to the nature of wood products
14. Panels must have anti-microbial finish
15. The manufacturer must be able to certify the wood products with FSC standard, principles, and criteria for forest stewardship with chain of custody certification
16. Panels must be independently certified to conform to California Department of Public health (CDPH) Standard Method v1.2: Private Office and School Classroom.
17. Wood wall and ceiling mounted panels must be tested in accordance with ASTM E84 surface burning characteristics by a third-party acceptable testing facility as a finished composite material with Class A (FS=25 or less – SD=450 or less) performance
18. The qualification, competency, and capability of an experienced installer(s) with a successful service record should be approved by the manufacturer prior to the installation
	1. SUBMITTALS
19. A complete set of shop drawing(s), RCP, layout, product details and installation instructions are required, showing all necessary dimensions, penetrations, interferences, discrepancies, notes for the architect approval. Must be subsequently field verified by the installers
20. Technical data sheet and fire performance test reports for the specified product to comply with the required criteria
21. LEED documentations including recycle content, CDPH low emitting materials certification, and distances
22. Three (3) sets of samples for each finished product to be manufactured as original material for verification of each type of exposed finish required, prepared on sample of size 8” × 11”
23. Fire test reports on supplied product(s) as components to meet the specified requirements issued by a third party certified independent laboratory
	1. DELIVERY, STORAGE, AND HANDLING
24. All crate sizes, weights, unloading options, scheduled delivery and unloading of suspension system in original unopened packages must be coordinated with the single source manufacturer prior to fabrication to be stored in fully enclosed on-site acclimatized storage, protected against damage from moisture, direct sunlight, and other mistreatment
25. Installation will only occur after materials have been acclimatized for a minimum of 72 hours in climate-controlled site condition between 68-81 degrees Fahrenheit (20-27 degrees Celsius) inclusive that meet the optimum moisture content and relative humidity requirements of 35% to 55% as per North American Architectural Woodwork Standards.
26. Wood panels must be handled and installed by persons wearing clean light-weight gloves

* 1. WARRANTIES
1. A reasonable percentage of extra wood panels and clips shall be furnished if specified with protective covering for storage
2. Manufacturer shall provide owner with a (1) year warranty against any manufacturing defect excluding abnormal site conditions, wood stain discoloring due to the age for all the installed material described in this specification from the final acceptance of completed work

PART 2 – PRODUCTS

1. Basis of Design: MCM Acoustical. 6860 Rexwood Road, Mississauga, ON L4V 1L8 Canada. info@mcmacoustical.com 905-670-3733
2. Product: LINEAR PANEL WITH BATTEN
3. Veneer Option: Natural, Recon, Quarter cut, Rift cut, Book match, Slip match, etc. Standard finish or stained to match control sample.
4. Panel Construction: Natural or Recon wood veneer to be laminated on fire rated medium density fiberboard (MDF) and grooved. Blades to be \_\_ wide and \_\_ thick. On center space to be \_\_. Blades joined by black aluminum batten. 1/8” High Density Fiberglass backer may be specified for acoustical performance. Panel sizes as per approved shop drawings.
5. Suspension System: Panels can be screwed to standard heavy duty 15/16” T-bar grid via pre-drilled holes in batten. All suspension hardware beyond the panels including the T-bar grid, hanger wires, rods, braces, and moldings to be provided by others as per ASTM standards

PART 3 – EXECUTION

* 1. PREPERATION AND INSTALLATION
1. Installation shall not begin until all substrates and the ceiling layout properly prepared to conform with reflected ceiling plans and approved shop drawings
2. It is the contractor’s responsibility to provide required support to install suspension system without interference with other elements and perimeters
3. The workspace must be fully enclosed to maintain the ambient environment as per section 1.6 of this specification.
4. The suspension system installation and engaging the wood panels must comply with all local codes and regulations, manufacturer's installation instructions