**Guide Specification**

**TYPE: WOOD BAFFLE**

**PROJECT:** **<Insert>**

09 54 26 – LINEAR WOOD CEILING PANELS

**PART 1 – GENERAL**

* 1. **SUMMARY**
1. Section Includes:
2. Concealed suspension system for Linear Wood Ceiling Panels.
3. Wood Baffle ceiling panels for concealed suspension system.
4. Trim and accessories
5. Seismic restraints for suspended ceiling system
	1. **RELATED WORK IN OTHER SECTIONS:**
6. Division 1 – “General Conditions” for substitution requests, submittals, etc.
7. Division 9 – “Acoustic Ceilings.”
8. Division 13 – “Integrated Assemblies.”
9. Division 15 – “Mechanical” for work to be coordinated with ceiling.
10. Division 16 – “Electrical” for light fixture coordination.
	1. **REFERENCES**
11. .1 ASTM International (ASTM):
12. .1 ASTM A641/A641M-19 – Standard Specification for Zinc Coated (Galvanized) Carbon Steel Wire.
13. .2 ASTM C423-22 – Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
14. .3 ASTM C635/C635M-22 – Standard Specifications for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
15. .4 ASTM C 636/C636M-19 – Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
16. .5 ASTM E84-21a – Standard Test Method for Surface Burning Characteristics of Building Materials.
17. .6 ASTM E 580/E580M-22 – Standard Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions.
18. .7 ASTM E 1264-22 – Standard Classification of Acoustic Ceiling Products.
19. .2 Architectural Woodwork Manufacturers Association of Canada (AWMAC):
20. .1 AWI/AWMAC – Architectural Woodwork Quality Standards Illustrated, current edition.
21. .3 Ceiling and Interiors Systems Construction Association (CISCA):
22. .1 CISCA – Ceiling Systems Handbook, current edition.
23. .4 National Building Code of Canada, Alberta edition 2019.
	1. **QUALITY ASSURANCE**
24. Manufacturer Qualifications: Manufacturers other than those listed in Paragraph 2.1 are required to submit for approval prior to bidding per Section One.
25. Installer Qualifications: Engage an experienced Installer, approved by wood ceiling manufacturer, who has completed panel ceilings similar in species, design, and extent to that indicated for this Project and with a record of successful in-service performance.
26. Provide seismic design of suspended ceiling under direct supervision of Professional Engineer experienced in design of this work and licensed at Project location.
27. Inspection: All work must pass inspection and approval of architect, as well as the local codes and regulations or authorities having jurisdiction.
28. Single-Source Responsibility for Wood Ceiling System: Obtain each type of Wood Baffle from a single fabricator, with in-house Shop Drawing capabilities, in-house assembly and finishing capabilities, and with resources to provide products of consistent quality in appearance and physical properties without delaying the project.
29. Single-Source Responsibility for Suspension System: Obtain each type of suspension system from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying project.
30. Pre-Installation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings."
	1. **SUBMITTALS**
31. General: Submit each item in this Section according to the Conditions of the Contract and Division 1 Specification Sections.
32. Product Data: For each type of product specified.
33. Samples: For verification of each type of exposed finish required, prepared on samples of size indicated below. Where finishes involve normal color and texture variations, include sample sets showing the range of variations expected

1. 12” Long samples of each panel type, pattern, and color.

* 1. **SHOP DRAWINGS & COORDINATION WITH OTHER TRADES**
1. Shop Drawings: Provide Shop Drawings/Coordination Drawings for all ceilings, which should include RCP and product details. Coordinate Wood Baffle layout, installation and suspension system components with other construction elements that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system components, partition assemblies and all perimeter conditions.
	1. **PROJECT CONDITIONS**
2. Space Enclosure and Environmental Limitations: Do not install Wood Baffles until spaces are enclosed and weatherproof, wet-work in spaces is completed and dry, work above ceilings is complete, and ambient temperature and humidity conditions are being maintained at the levels indicated for Project when occupied for its intended use.
3. Plenums have proper ventilation, especially in high moisture areas with no excessive build up of heat in the ceiling areas.
	1. **DELIVERY, STORAGE, AND HANDLING**
4. Delivery & Unloading: Coordinate crate sizes, weights, unloading options, and delivery schedule with manufacturer prior to fabrication. Deliver Wood Baffles and suspension system components to Project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other mistreatment.
5. Acclimatization: Before installing Wood Baffles, permit them to reach room temperature and a stabilized moisture content (at least 72 hours) per AWI standards.
6. Handling: Handle Wood Baffles carefully to avoid chipping edges or damaging units in any way.
7. Protection:
8. Personnel: Follow good safety and industrial hygiene practices during handling and installing of all products and systems, with personnel to take necessary precautions and wear appropriate protective equipment as needed. Read related literature for important information on products before installation. Contractor to be solely responsible for all personal safety issues during and subsequent to installation; architect, specifier, owner, and manufacturer will rely on contractor’s performance in such regard.
9. Existing completed work: Protect completed work above suspension system from damage during installation of suspension system components.
	1. **EXTRA MATERIAL/WARRANTIES**
10. Extra Materials: Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels clearly describing contents.
11. Wood Baffles: Furnish quantity of full-size units equal to 2.0 percent of amount installed.
12. Suspension System Components: Furnish quantity of each component equal to 2.0 percent of amount installed.
13. Warranties: Provide owner with a (1) year warranty for material and workmanship on all installed products.
14. Manufacturers: All materials, Wood Baffles, and suspension systems, shall be warranted for (1) one year for material and workmanship.
15. Installer: All work shall be warranted for (1) year from final acceptance of completed work

**PART 2 – PRODUCTS**

* 1. **WOOD BAFFLES AND SUSPENSION SYSTEM**
1. General: The following manufacturer is basis of design:
2. LINEA Ceiling & Wall Systems

2320 Peardonville Road, Abbotsford, BC, Canada, V2T 6J8

Ph. 1-604-776-2265 / Website: www.LineaCeilings.com / Email: Sales@LineaCeilings.com

1. Or equal, as prior approved by architect.
2. Substitution: Not permitted
	1. **WOOD BAFFLES**
3. Product: LINEA WOOD BAFFLES - VENEER
4. LINEA Ceiling & Wall Systems. (www.LineaCeilings.com):
5. Veneer: <Insert wood specie and grain type required; Ex. White Oak, Rift Cut>
6. Core: Class A Fire Rated <MDF or Particleboard>
7. Edge: Square w/ matching veneer (3 sides)
8. Baffle Width: <3/4"> <1”> <1-1/4”> <1-3/8”> <1-1/2”>
9. Baffle Depth: <5-3/4”> <7-3/4> <9-3/4> <11-3/4>
10. Baffle Length: 96” <120”> <See RCPs>
11. Face Texture: Smooth <LINEA Textured>
12. Color: Natural <Custom Stain, Tinted or Painted to match Architect sample>
13. Finish: Clear, <Matte, Satin, or Semi-Gloss> Sheen; Interior Grade
14. Fire Rating: Class A <Class C>
15. Assembly: Loose
16. Joining: <if applicable, Biscuits or Lamello Tenso connector for Closed butt-joint
17. Suspension: <Direct screw to T-bar> <Threaded eyelets> <15/16” Twist Clip w/ 90° 1/4" hole> <C-Hangers> <Aircraft cable mounting brackets> <D-Ring> <Strut channel>
18. Product: LINEA WOOD BAFFLES – SOLID WOOD
19. LINEA Ceiling & Wall Systems. (www.LineaCeilings.com):
20. Species: <Insert wood specie and grain type required; Ex. White Oak, Rift Cut>
21. Core: Solid Wood
22. Edge: Square
23. Baffle Width: <3/4"> <1”> <1-1/4”> <1-3/8”> <1-1/2”>
24. Baffle Depth: <4-1/4> <5-1/4”>
25. Baffle Length: 96” <120”> <See RCPs>
26. Face Texture: Smooth <LINEA Textured>
27. Color: Natural <Custom Stain, Tinted or Painted to match Architect sample>
28. Finish: Clear, <Matte, Satin, or Semi-Gloss> Sheen; Interior Grade
29. Fire Rating: Class A <Class C>
30. Assembly: Loose
31. Joining: <if applicable, Biscuits or Lamello Tenso connector for Closed butt-joint
32. Suspension: <Direct screw to T-bar> <Threaded eyelets> <15/16” Twist Clip w/ 90° 1/4" hole> <C-Hangers> <Aircraft cable mounting brackets> <D-Ring> <Strut channel>
33. Product: LINEA WOOD BAFFLES - ACOUSTIC
34. LINEA Ceiling & Wall Systems. (www.LineaCeilings.com):
35. Veneer: <Insert wood specie and grain type required; Ex. White Oak, Rift Cut>
36. Core: Class A Fire Rated MDF w/ Acoustic Infill
37. Edge: Square w/ matching veneer (3 sides)
38. Baffle Width: 1-1/2”
39. Baffle Depth: <5-3/4”> <7-3/4> <9-3/4> <11-3/4>
40. Baffle Length: 96” <120”> <See RCPs>
41. Style: MicroPerf
42. Face Texture: Smooth <LINEA Textured>
43. Color: Natural <Custom Stain, Tinted or Painted to match Architect sample>
44. Finish: Clear, <Matte, Satin, or Semi-Gloss> Sheen; Interior Grade
45. Fire Rating: Class A <Class C>
46. Assembly: Loose
47. Joining: <if applicable, Biscuits or Lamello Tenso connector for Closed butt-joint
48. Suspension: <Direct screw to T-bar> <Threaded eyelets> <15/16” Twist Clip w/ 90° 1/4" hole> <C-Hangers> <Aircraft cable mounting brackets> <D-Ring> <Strut channel>
	1. **SUSPENSION SYSTEMS, GENERAL**
49. Attachment System for Wood Baffles shall be suspended according to manufacturers suggested method of suspension as per the design details provided in the plans.
50. Fabricate Wood Baffles to attach to the ceiling/floor deck above. Baffles may be suspended using 15/16” T-Bar, Threaded eyelets and hanger wire, C-Hangers, Mounting brackets, D-Rings, Twist Clips or strut channel with slots, appropriate uniform load rating for baffle configuration and spacing. Wood Baffles are intended for decorative purposes only, electrical fixtures, HVAC equipment and fire suppression components should be independently supported and shall not rest on or wrap around the baffles in any way.
51. Metal T-Grid Suspension System: Provide standard interior Metal Heavy Duty 15/16” suspension T-Grid system using Main Runners, Cross-tees, Wall Angle or Shadow Moldings of types, structural classifications, and <black> finishes indicated and that comply with applicable ASTM C 635 requirements. Comply with all applicable <seismic> codes and ordinances.
52. Seismic Installation: Where applicable, install suspension system in accordance with ASCE 7-10, including design load of anchors, consideration of seismic interaction effects, and range of motion.
53. Attachment Devices: Size for 3 times the design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.
	1. **ACCESSORIES**
54. Biscuits or Lomello Tenso connectors
55. Threaded eyelets: Suspension hangers that are direct-screwed to the panel and hang from hanger wire or aircraft cables from suspension system, floor deck or ceiling. Can be used with 15/16” Twist Clips
56. 15/16” Twist Clips with 90° 1/4" diameter hole: Suspension hangers that attach to 15/16” heady-duty grid and allow for suspension using S-hooks, chain or aircraft cable. Can be used with threaded eyelets.
57. C-Hangers: Suspension hangers that are direct-screwed to the panel and hang over the heavy-duty grid. Hangers are made of spring-steel with phosphate pre-treatment and corrosion-resistant coating.
	1. **FINISH**
58. Factory Finishing: Panel shall be factory-finished with manufacturer’s standard lacquer products per color selection by architect.
59. Due to the nature of real wood (variation in grain, texture and color) the finished product may range from light to dark affecting the look of the panels.

**PART 3 – EXECUTION**

* 1. **EXAMINATON**
	2. General: Examine substrates and structural framing to which ceilings attach or abut, with installer present, for compliance with requirements specified in this and other sections that affect ceiling installation and anchorage. Do not proceed with installation until unsatisfactory conditions have been corrected.
	3. **INSTALLATION AND ADJUSTMENTS**
	4. Comply with manufacturer’s instruction and recommendations for installation of wood baffles and industry standards
	5. Coordinate the exact size, location, and sequencing of baffles
	6. Layout baffle pattern per manufacturer’s approved shop drawings if required. Where not otherwise indicated, lay out baffles so margins on opposite sides of rooms are equal.
	7. Adjust baffles after installation so that surfaces are aligned, flush, and level with gaps between units consistent in width and straight

* 1. **CLEANING**
	2. General: Clean exposed wood surfaces of wood ceiling panels. Comply with manufacturer’s instructions for cleaning and touchup of minor finish damage. Remove and replace wood ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.
	3. **INSPECTION**
	4. When LINEA Ceiling & Wall Systems WOOD BAFFLES have been completely installed, the owner and/or the owner’s representative shall inspect all finished surfaces of the wood ceiling system to validate that the work has been completed in compliance with these specifications. Any defect in meeting installation specifications shall be corrected by the installing contractor at no additional cost to the owner and/or LINEA Ceiling & Wall Systems.

**END OF SECTION**