

WOOD BOOK YY24

// ARCHITECTURAL INSPIRATION



solutions
acoustiques
2012



Project: AOC
Scope: CFRF Woodgroove panel's (pg 28-33)
Veneer: Ash

LEED

(Leadership in Energy & Environmental Design)

LEED makes an integrated building assessment based on five environmental themes:

-  1. Sustainable Sites
-  2. Water Efficiency
-  3. Energy & Atmosphere
-  4. Materials & Resources
-  5. Indoor Environmental Quality

LEED not only assesses the sustainable performance of the building, but also the quality assurance with which the design, realization and management phase is completed.

There are separate assessment systems within LEED for different building types & building projects, tailored to the nature of the project. The rating system LEED for New Construction (2009) is a frequently used instrument.

Materials & Resources and Indoor Environmental Quality are important for veneered panels for walls & ceiling applications. This means that questions can be asked about recycle content and VOC volatile substances.



WHAT ARE VOCs?
Substances that evaporate at room temperatures and are commonly found in household products & building materials.

VENEER PANELS

The panel face (view side) is finished with a high quality hand-selected 0.6 mm thick veneer. All panels are finished in a premium clear lacquered finish, over a three-stage process to ensure the highest standard of durability and performance.

Custom staining options, RAL or NCS colour matching are also available.

Manufacturer's standard is **Mis-matched** (random order) veneer, providing a natural or variable wood art effect. **Book-matched** and **Slip-matched** also available upon request.

Over 60 species of wood available:



Beech Birch Maple Ash Oak



Walnut US Cherry

Book-matched
panels are slid and flipped.
(repeating pattern over two
panels where the grain lines
connect at either end)



Slip-matched
panels are "slipped" over
without turning or flipping.
(repeat pattern effect)



Mis-matched
panels are placed in a random
order and orientation.
(random order)



OUR VENEERED PANELS ARE MADE OF ENGINEERED SOLID WOOD (ESW)

Post-Consumer Recycled Content:

Wood-based materials such as our MDF, chipboard and plywood are separated and used as bio-mass energy for electricity plants. Recycled content 100%.

Post-Industrial Recycled Content from

External Sources: ESW MDF is made from the parts of the trees that can not be used for veneer manufacturing or sawn solid wood. These parts of the trees therefore will be used for manufacturing MDF and/or chipboard as engineered solid wood. Recycled content 30-40%.

Post-Industrial Recycled Content from

In-House Process: During our ESW manufacturing process, all the leftovers and cut-off parts are repurposed in the process. Recycled content is 100%.



ESW veneered acoustic wall + ceiling panels consist of veneered MDF with a matte lacquer top layer. The core material of the MDF meets international standards and the glue used is virtually formaldehyde-free.

The UV polyacrylate lacquer layer applied to the veneer face is closed, preventing emission of any volatile substances.

Veneered acoustic panels contribute to a healthy indoor climate, because no emissions can occur and the wood neutralizes fluctuations in humidity.

Our panels ensure FSC® standard, showing our commitment to environmental conservation and concern about the origin of the wood used in our products, making every effort to ensure the wood we sell does not belong to any of the following categories:

- Wood obtained in breach of traditional and civil rights.
- Wood obtained in forests whose conservation is under threat due to the way they are being managed.
- Wood obtained in forests undergoing conversion for crops or non-forest use of the ground.
- Wood obtained from forests in which genetically modified trees have been planted.

Our wood manufacturer is committed to embracing sustainable forest management practices and sharing them with all stakeholders. In pursuit of this objective, it is imperative to cultivate awareness among suppliers regarding best practices in this domain, motivating them to assume responsibility within the Forest Responsibility Chain.

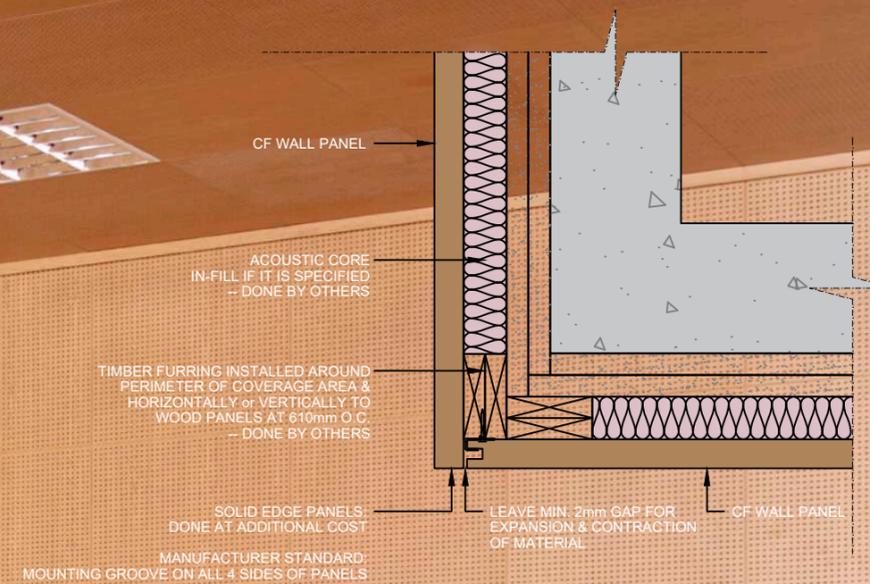
Acoustics for Architectural Spaces

Carrying out an architecture project is a multifaceted task that involves several aspects simultaneously working together to sustain all the requirements of human comfort: Temperature, Lighting, Air Quality, and Acoustics.

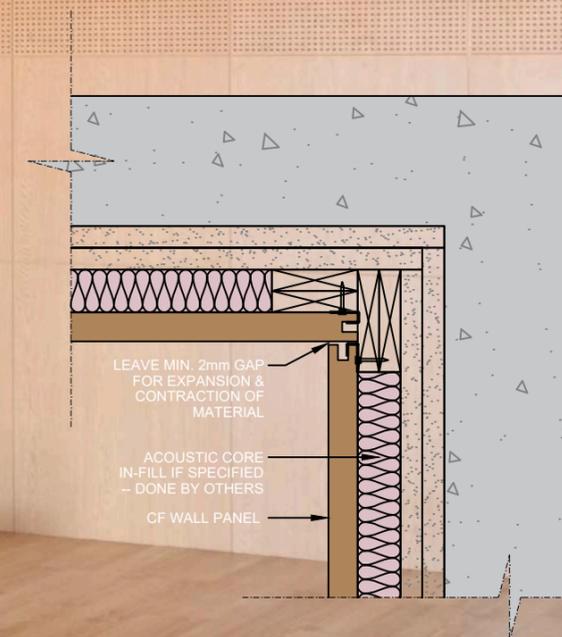
The Acoustical Performance and Materials used in an architectural space should be looked upon as a crucial factor in determining the overall quality of the project design, and how successful the building is in fulfilling its respective functions.

Acoustic conditioning studies should be performed in interior spaces as common practice. The use of high-quality and duly certified wood products, that are only supplied by specialized manufacturers, are essential factors in achieving the desired goals of any architectural space.

How wood panels are manufactured and their respective installation methods determine the overall acoustic performance and design of the space.



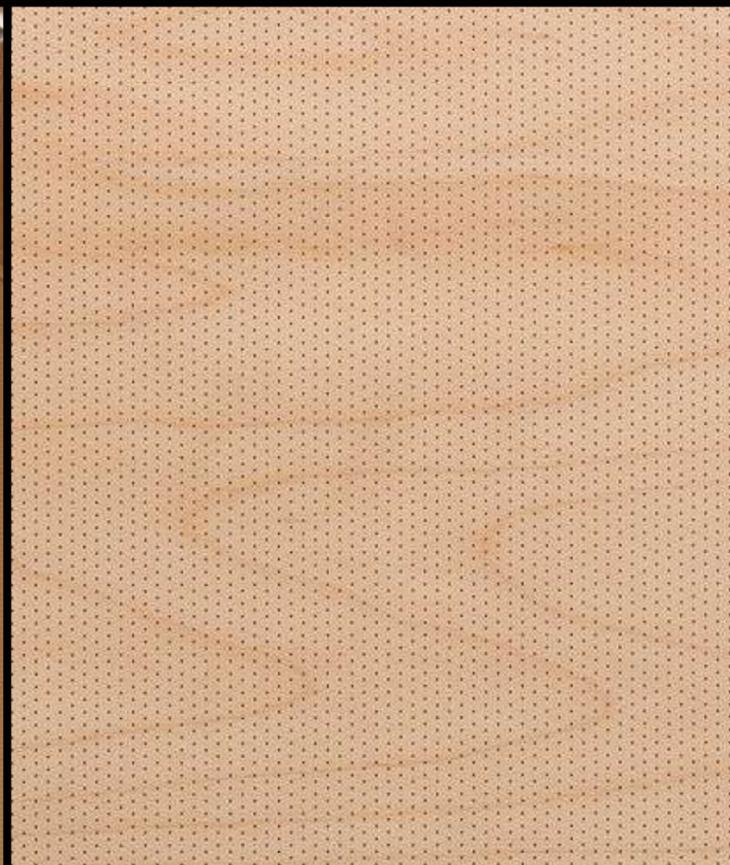
1 TYPICAL OUTSIDE CORNER DETAIL
SCALE: 1:100



2 TYPICAL INSIDE CORNER DETAIL
SCALE: 1:100

Project: Fábrica da Música - Castro Verde
Scope: CF6 Micro-perforated panel's
Veneer: Beech

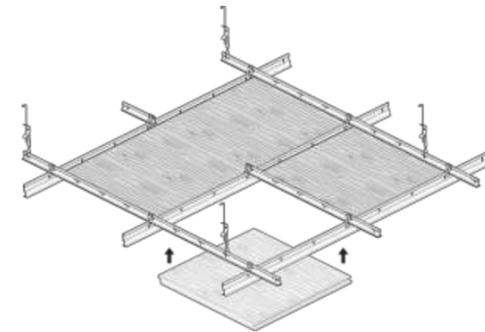
WOOD CF PANELS (CEILING)



CF WOOD CEILING OPTIONS: (Custom width/lengths available)
 Max. Size: 610mm W x 1220mm L x 16mm Thk. or 19mm Thk.
 Type: Drop-in / lay-in ceiling tile in 2x2 | 2x4 tile sizes.
 Edges: Raw unfinished edges w/ mounting grooves on all 4 sides
 Installation: Lay-into T-24 profile metal tee grid ceiling system
 Perforations: CF Micro, CF0 Solid, CF5, CF6, CF8 and CF8 16/16
 Perf. Type: Irregular perforation pattern or Regular (straight)

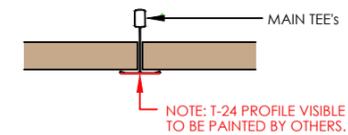


ACOUSTIC PERFORMANCE: (Test data available upon request)
 CF WOOD panels can achieve NRC of .85
FLAMEABILITY: (Fire testing data available upon request)
 Fire testing conducted by independent testing laboratories.
INSTALLATION: Typical T-24 profile grid ceiling system
 Lay-in or drop-in ceiling tiles into typ. 2x2 or 2x4 ceiling grid system.

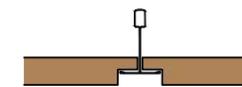


CEILING GRID LAYOUT: (Recommended typical 2x4 grid)
 610mm x 1220mm with MAIN TEEs BEING RUN PERPENDICULAR TO
 THE DIRECTION OF PANELS @ 610mm O.C.

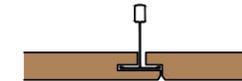
STANDARD: Manufacturers recommended method of install



REGULAR T24:



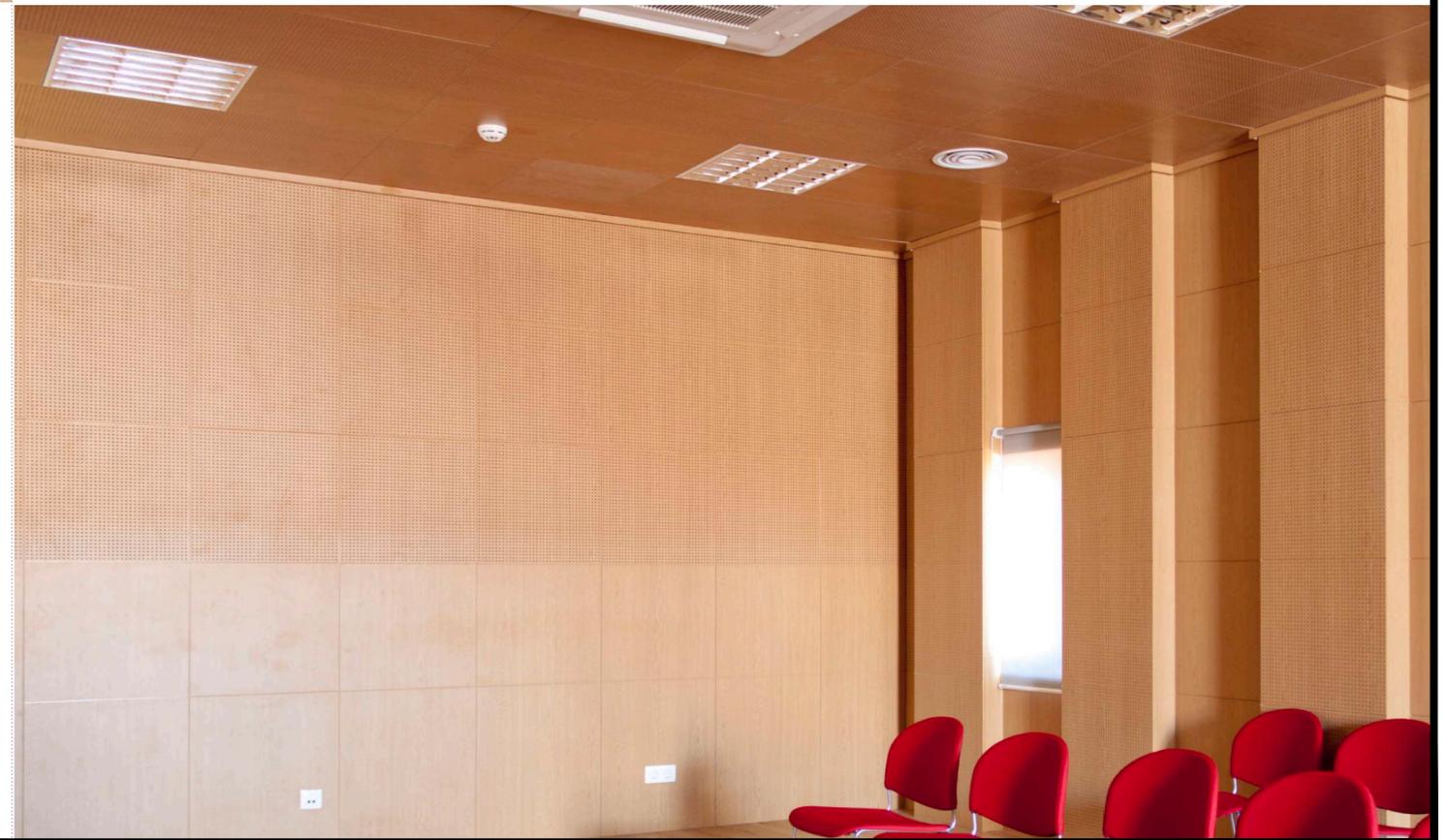
HIDDEN:



NOTE: HIDDEN METHOD, IS **NOT RECOMMENDED**
 IF PANEL INSTALLERS OR MAINTENANCE WORKER LEAN UP
 AGAINST TEEs TO ACCESS HATCH PANELS OR CEILING
 FIXTURES.

PANEL MAINTENANCE & STORAGE:

Cleaning is performed with a dry mop or vacuum cleaner.
 On grease, fruit, wine and coffee stains, use synthetic
 detergent without ammonia. Blood stains are removed
 using cold water. Storage use and installation at 18-50 C °
 and 25-60% relative humidity. The humidity of the underlying
 structure (concrete) should not exceed 15%



WOOD SLAT



Project: Hotel Lobby
Scope: 90mm Woodslat wall panels
Veneer: Natural Oak

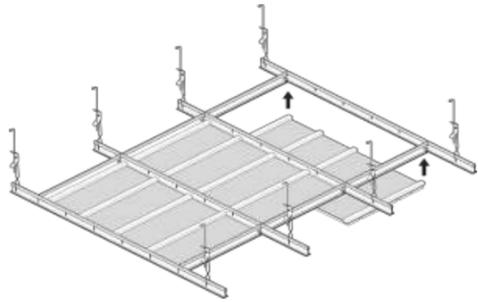
WOOD SLAT-TILE

(Lay-in ceiling tile)

ACOUSTIC PERFORMANCE: (Test data available upon request)
WOODSLAT-TILE's can achieve NRC of .80 depending install.

FLAMEABILITY: (Fire testing data available upon request) Fire testing conducted by independent testing laboratories.

INSTALLATION: Typical T-24 profile grid ceiling
Lay-in or drop-in ceiling tiles into typ. 2x2 or 2x4 ceiling grid.



LAY-IN TILE METHOD: (E.g. Shows lay-in tiles into Main Tee runners)

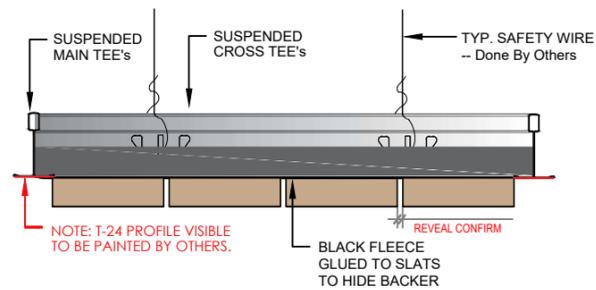
Black Plywood Backer: Pre-installed to slats by manufacturer

Install: Lay-in backer into Main Tee's done by panel installers

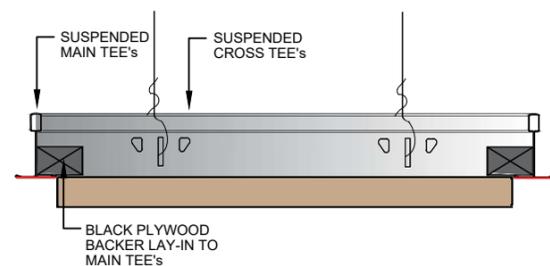
Manufacturer recommended maximum 4 slats per lay-in tile

CEILING GRID LAYOUT: (Recommended typical 2x4 grid)
610mm x 1220mm with MAIN TEEs BEING RUN PERPENDICULAR TO THE DIRECTION OF PANELS @ 610mm O.C.

Vertical Section View: Below detail NTS

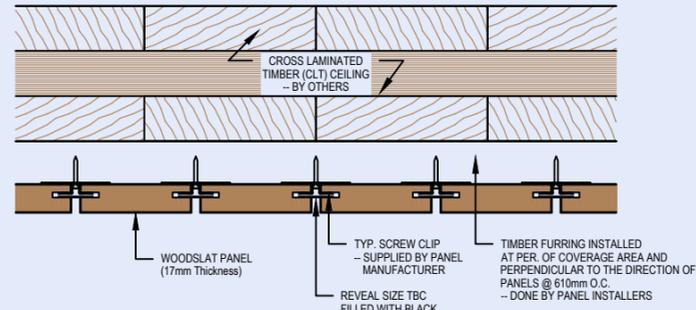


Horizontal Section View: Below details NTS

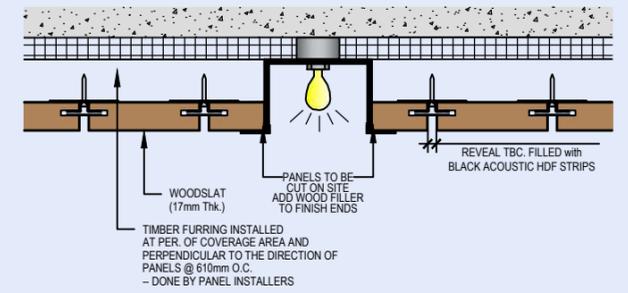


Project: Gallery Office's
Scope: 2x4 lay-in Woodslat-Tile's
Veneer: Oak

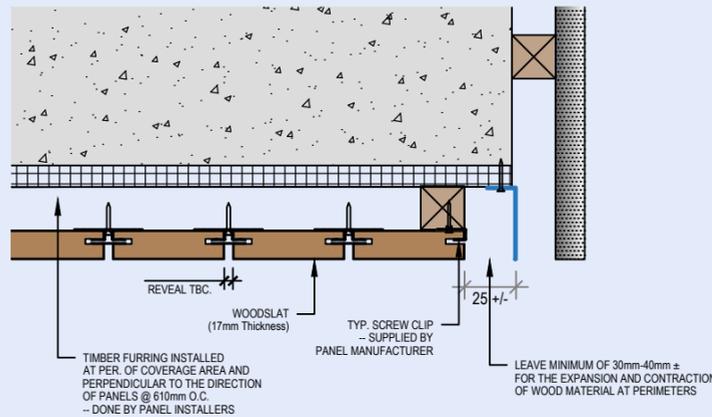
WOOD SLAT (EXT.)



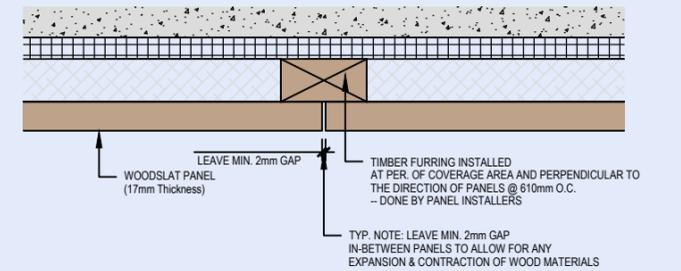
6 TYP. DETAIL AT CLT CEILING TYPE -- HORIZ. SECTION
SCALE: 1:100



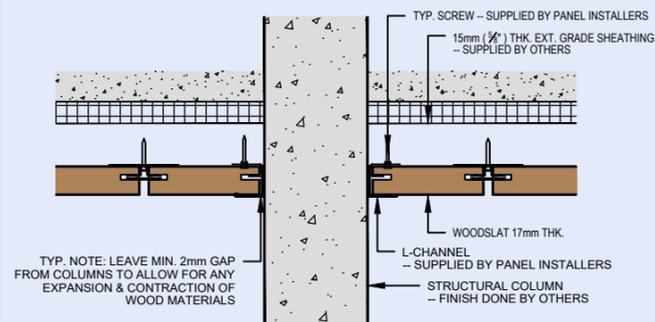
5 TYP. DETAIL AT EXTERIOR RECESSED CAN LIGHT
SCALE: 1:100



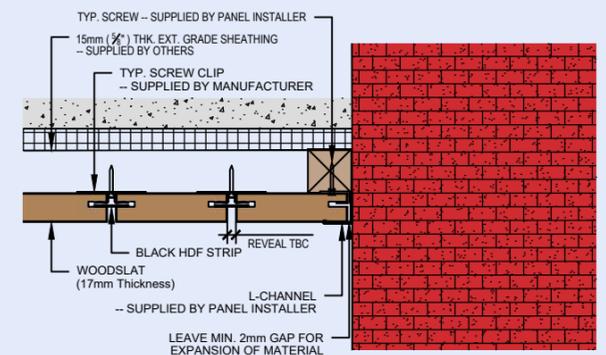
4 TYP. DETAIL AT EXTERIOR SOFFIT/CANOPY
SCALE: 1:100



3 TYP. DETAIL AT PANEL ENDS -- VERTICAL SEC.
SCALE: 1:100

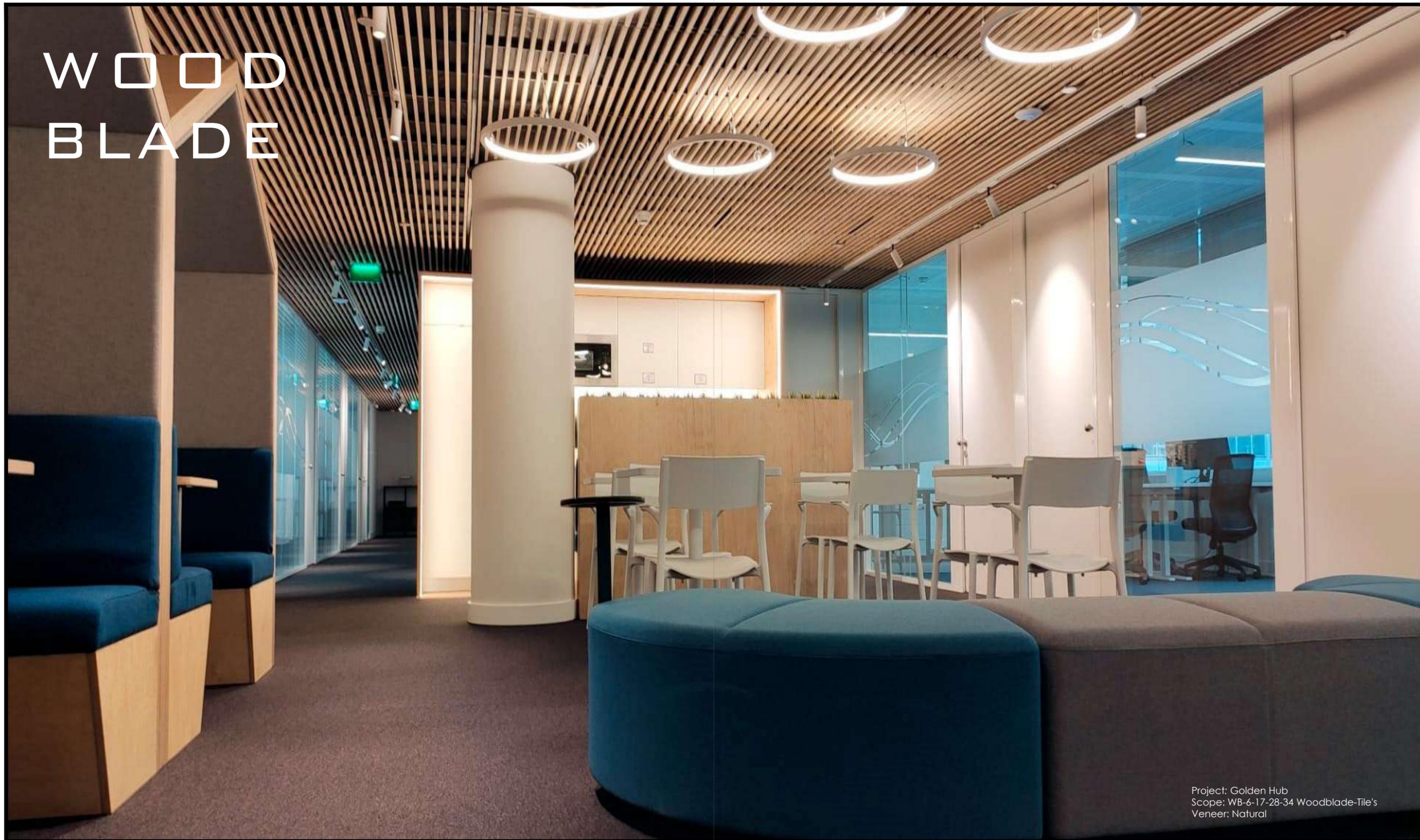


2 TYPICAL DETAIL AT EXTERIOR CONCRETE COLUMN
SCALE: 1:100



1 TYP. DETAIL AT EXTERIOR CORNER
SCALE: 1:100

WOOD BLADE



Project: Golden Hub
Scope: WB-6-17-28-34 Woodblade-Tile's
Veneer: Natural



WOOD BLADE-TILE

(Lay-in ceiling tile)

TECHNICAL DATA:

Veneer:	FCS Certified Sliced Real Wood Veneer Veneer, 0.6 mm Quality AA
Finish:	Clear Matt Finish
Blade Edge:	Square edge
Back:	3mm Black Acoustic Wool/Felt -- <i>additional cost</i>
Acoustic Core:	25mm Thk. or 50mm Thk. Acoustic Core
Connection:	17mm Thk. Fire-retardant Black Plywood Backer
Fire Cert.	CAN /ULC S102 Class 1
Fire Cert. EU	EN 13501-1: Class B, s2, d0
Fire Cert. USA	ASTM E-84: Class A/ NFPA 265; UBC 8-2: Passes
Mounting:	Lay Plywood Backer Tile into Heavy Duty Gauge T-24 profile metal ceiling grid system

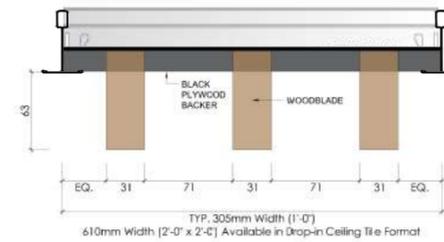
TYPICAL PANEL DIMENSIONS:

Size (mm): 305 x 2780 | 610 x 1220 (lay-in tile) | 610 x 610 (lay-in tile)

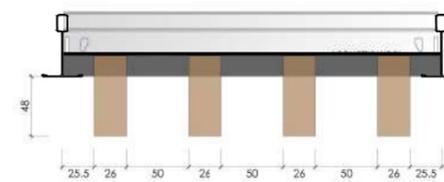
Thickness: 17mm Plywood Backer Thickness + Blade Depth

WOODBLADE OPTIONS: (Custom blade sizing available)

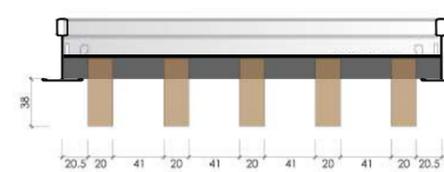
3 BLADE MODULE: WB-3-31-63-71



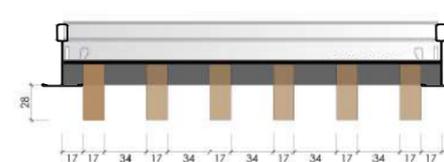
4 BLADE MODULE: WB-4-26-48-50



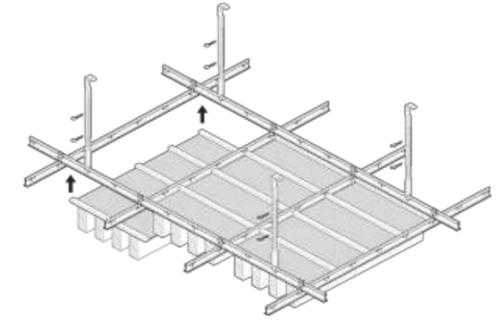
5 BLADE MODULE: WB-5-20-38-41



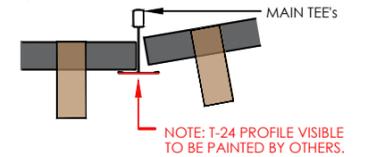
6 BLADE MODULE: WB-6-17-28-34



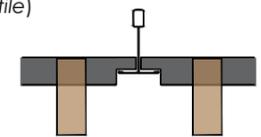
ACOUSTIC PERFORMANCE: (Test data available upon request)
 WOODBLADE lay-in ceiling tile's can achieve NRC rating of .85
FLAMEABILITY: (Fire testing data available upon request)
 Fire testing conducted by independent testing laboratories.
INSTALLATION: Typical T-24 profile grid ceiling system
 Lay-in or drop-in ceiling tiles into typ. 2x2 or 2x4 ceiling grid system
CEILING GRID LAYOUT: Typical 2x4 grid layout recommended
 610mm x 1220mm with Main TEEs being run perpendicular to the direction of panels @ 610mm O.C.



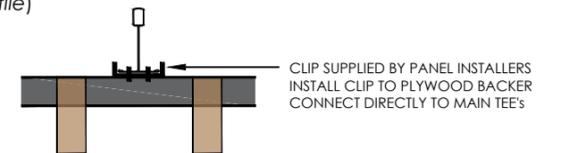
CONNECTION: Black plywood backer
STANDARD: Manufacturers recommended method of install (removable tile)



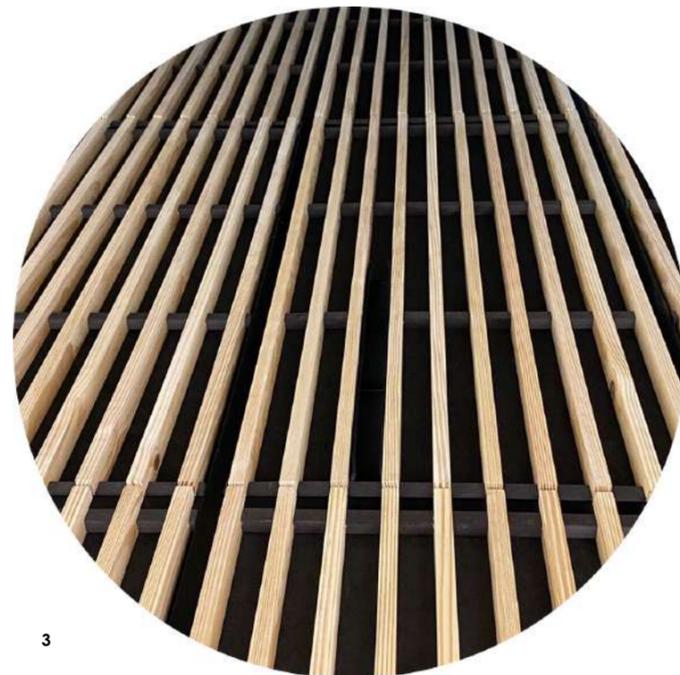
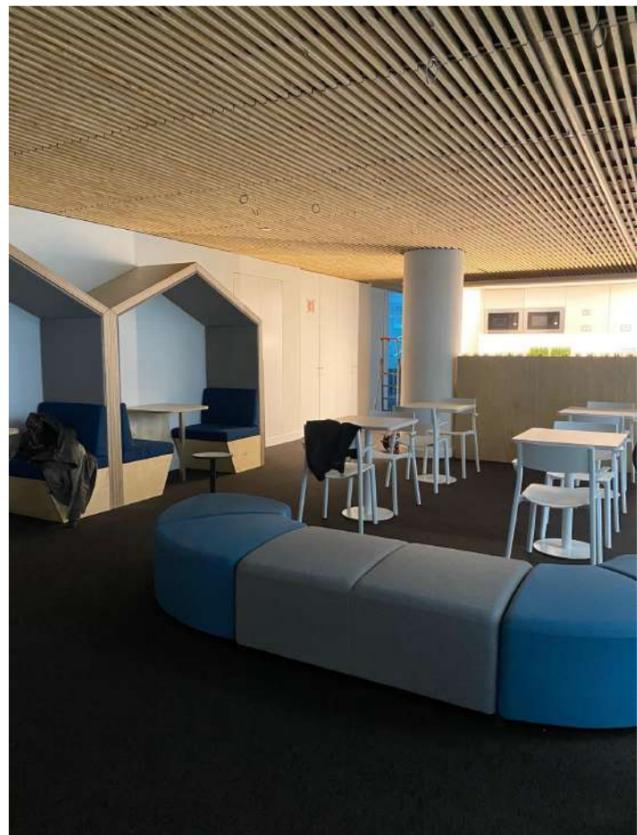
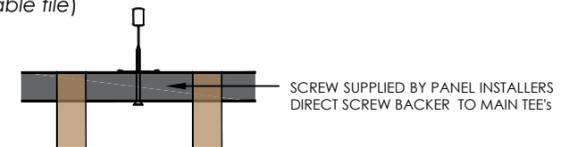
REGULAR T24: Creates shadow affect, note T-24 profile still visible (removable tile)



HIDDEN: Using T-24 profile U-clip or Turn-clip, installed to backers (removable tile)



DIRECT MOUNT: Direct screw backer to Main Tee runners (non-removable tile)

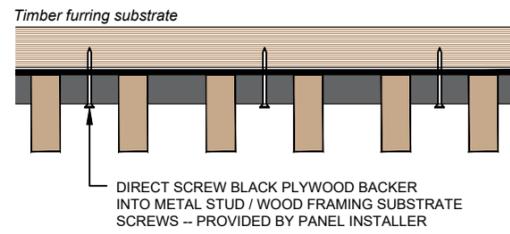


WOOD BLADE-WALL

ACOUSTIC PERFORMANCE: (Test data available upon request)
WOODBLADE panels can achieve NRC of .80 depending install.

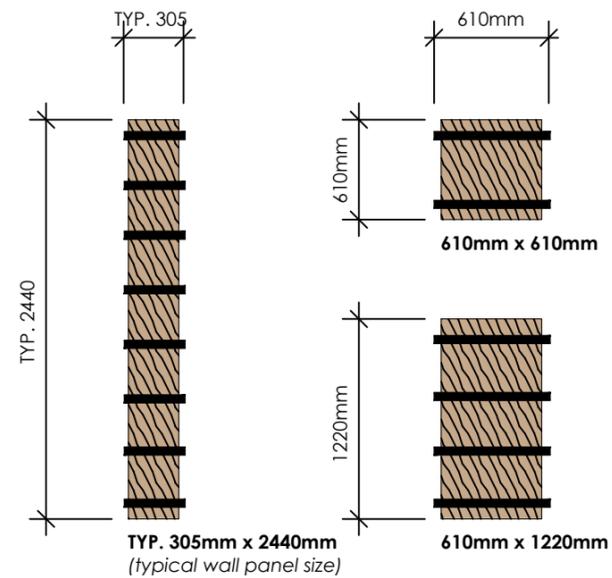
FLAMEABILITY: (Fire testing data available upon request)
Fire testing conducted by independent testing laboratories.

WALL INSTALLATION: Typical direct screw black plywood backer into wall substrate.
Do not drill screws into the drywall layer only.



TYPICAL MODULE DIMENSIONS:

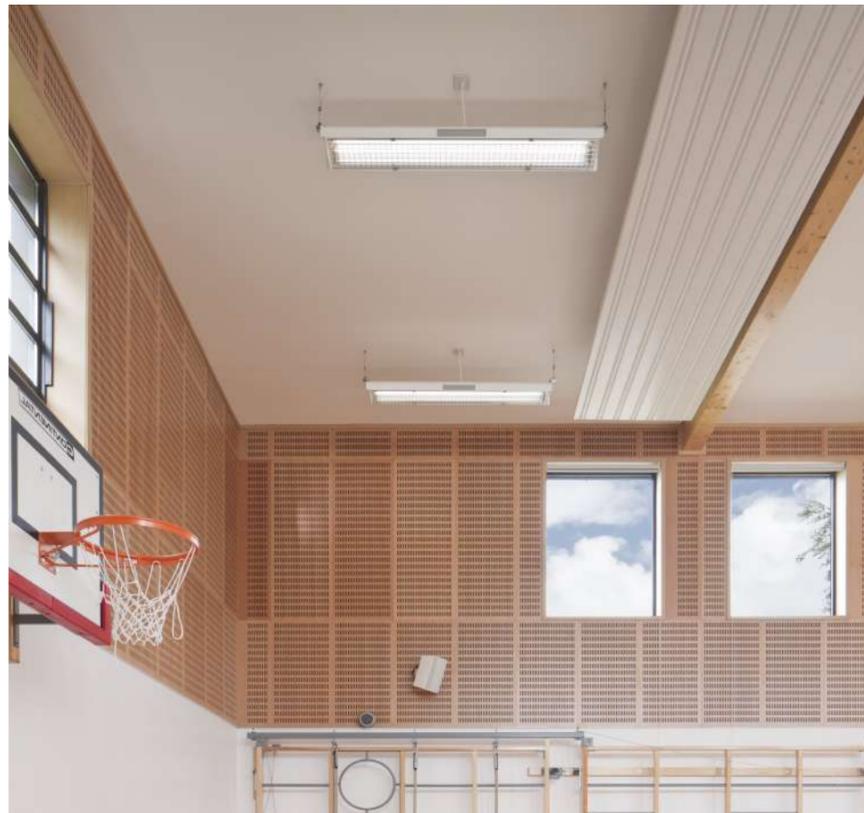
Thickness: 17mm Black Plywood Backer + Blade Depth (required)
Plan View: Below details NTS



Project: Edificio Lisópolis
Scope: CFRF 3-12-32-16 Woodblade panel's
Veneer: Oak

WOOD SLOT





1



2



3

Sport Venue Acoustics

Sports venues, due to their function, produce substantial noise and reverberation. Therefore, they have specific acoustical requirements.

These venues include facilities such as stadiums, arenas, gymnasiums, sports fields, and race tracks.

Utilizing acoustic panels with high absorption capabilities enhances the experience for everyone, including athletes, coaches, and spectators.

Project: East Craig Primary School
 Scope: CFR 48 Woodslot panel's
 Veneer: Oak

WOOD SLOT

SQUARE

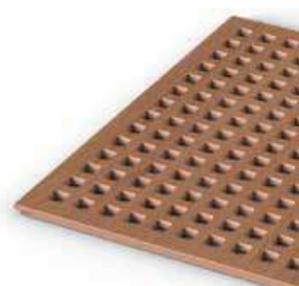
REF.	mm	% PERF.
CFQ 18x18	18	27,91%
CFQ 24x24	24	30,66%
CFQ 31x31	31	31,92%

GROOVING

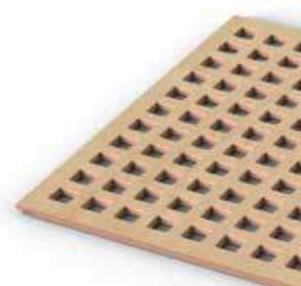
REF.	mm	% PERF.
CFR 48	100x8	10,05%
CFR 128	40x8	10,47%
CFR 216	40x8	18,14%



CFQ 18x18



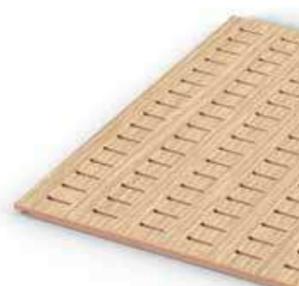
CFQ 24x24



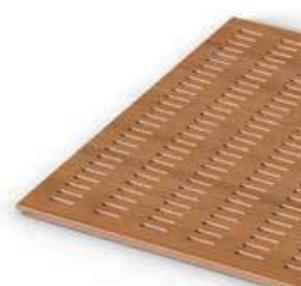
CFQ 31x31



CFR 48



CFR 128



CFR 216



4



5



6

WOOD GROOVE



Project: Wolverhampton Business School
 Scope: CFRF 3-12-32-16 Woodgroove panel's
 Veneer: Oak

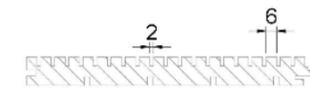
TYPICAL PANEL DIMENSIONS:

Module Size (mm): 128 x 2480 | 160 x 2400 | 160 x 2790
 Panel Thickness: 16mm

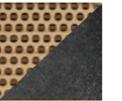
Section View: *below not to scale*

Front View: Back View:

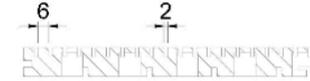
CFRF 2-0 (Non-perf. back)



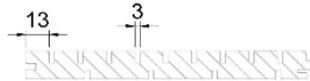
CFRF 2-12 - 16-16 (Ø12mm perfs.)



CFRF 2-12 - 16-32 (Ø12mm perfs.)



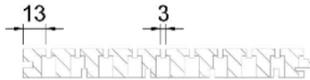
CFRF 3-0 - 16 (Non-perf. back)



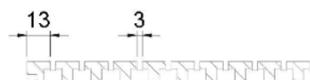
CFRF 3-0 - 32 (Non-perf. back)



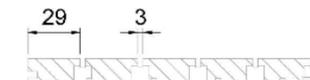
CFRF 3-8 - 16-32 (Ø8mm perfs.)



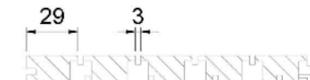
CFRF 3-10 - 16-16 (Ø10mm perfs.)



CFRF 3-10 - 32-32 (Ø10mm perfs.)



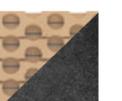
CFRF 3-12 - 32-16 (Ø12mm perfs.)



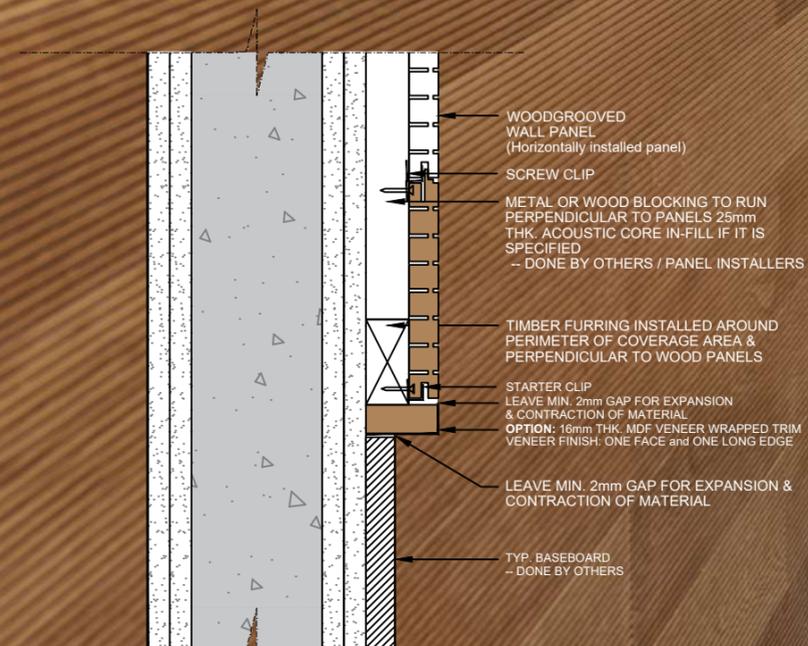
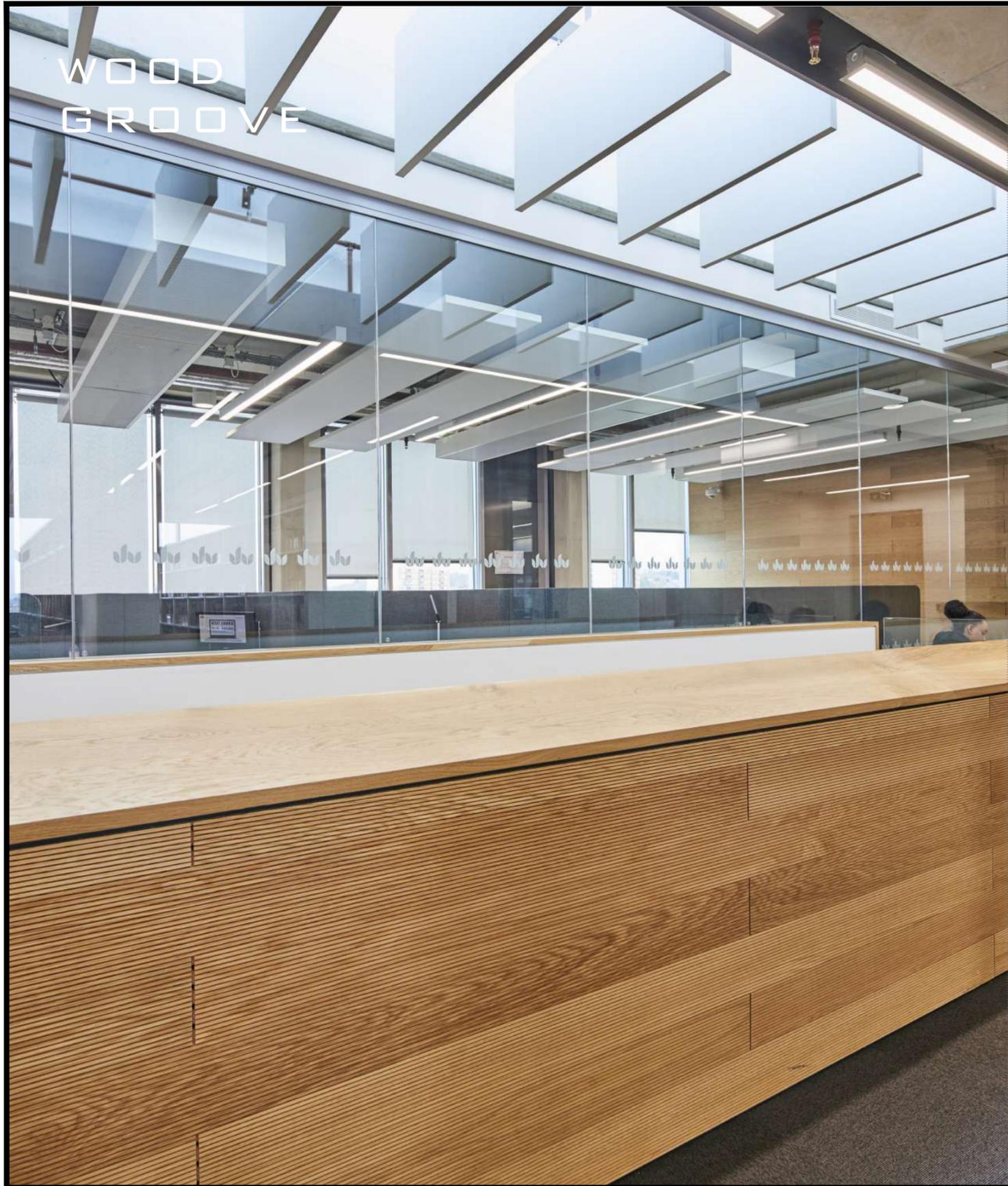
CFRF 3-12 - 32-32 (Ø12mm perfs.)



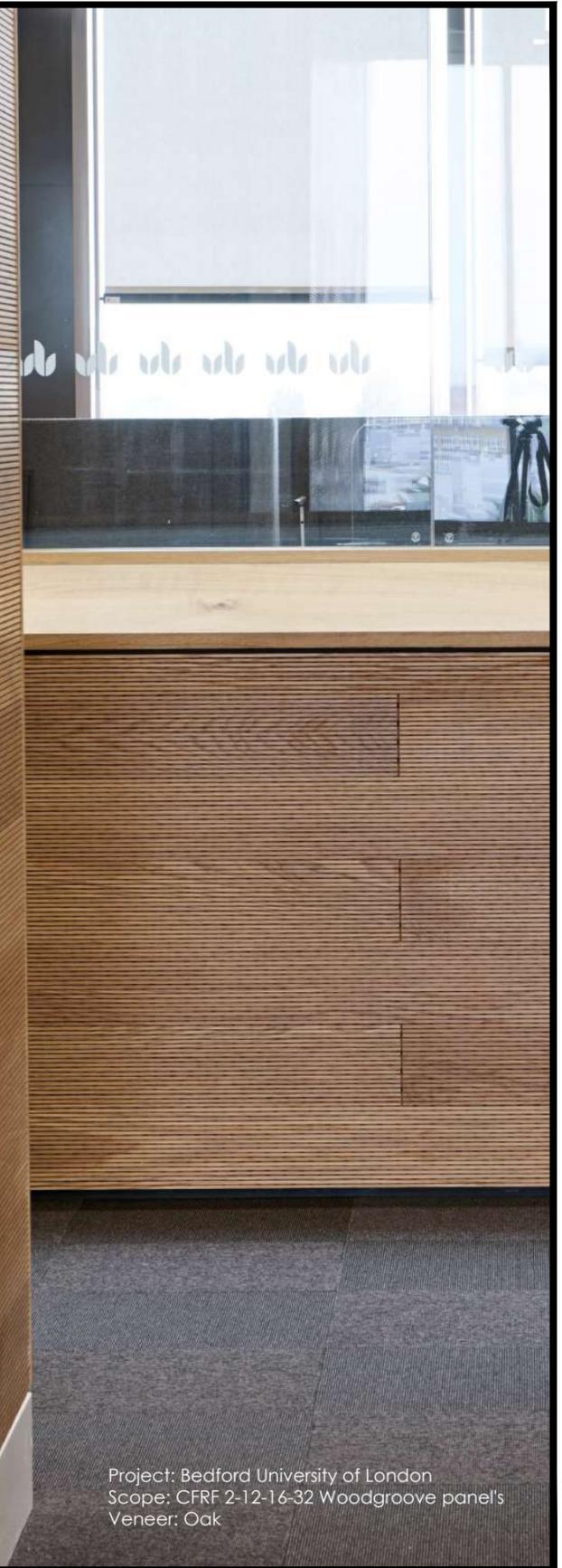
CFRF 3-25 - 32-32 (Ø25mm perfs.)



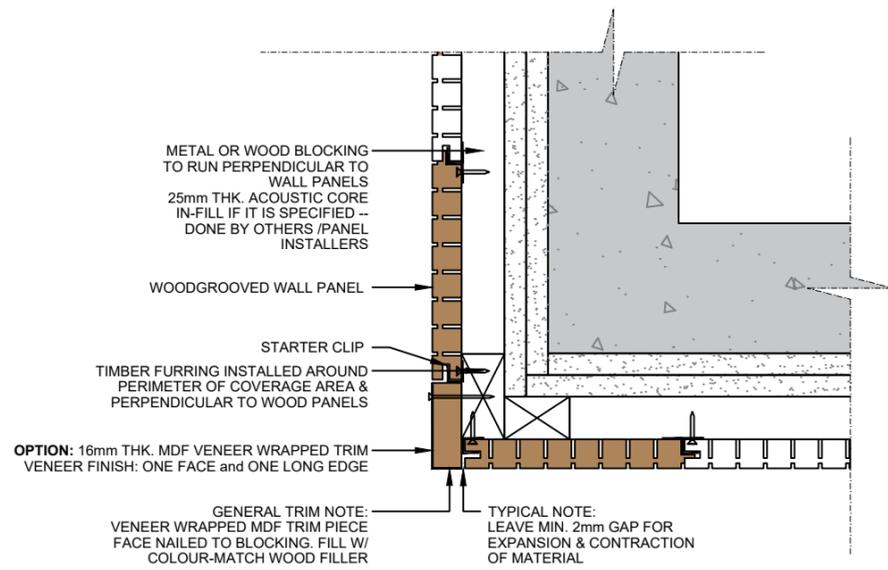
WOOD
GROOVE



1 TYP. DETAIL AT BASEBOARD (*trim piece option*)
SCALE: 1:100

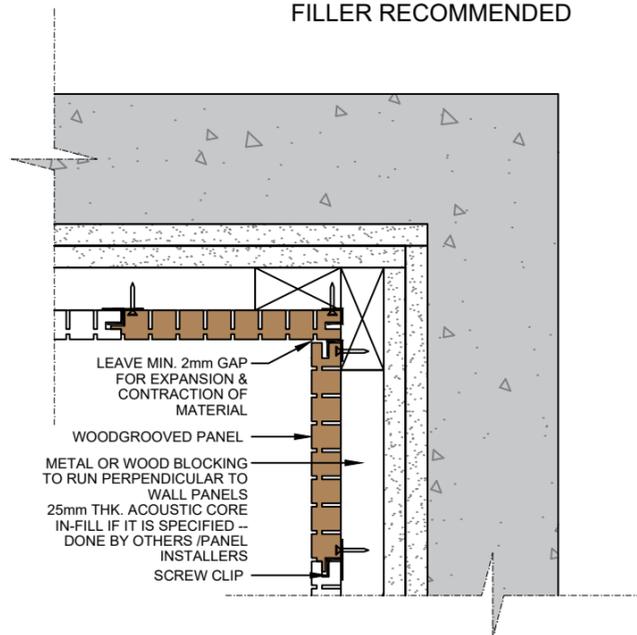


Project: Bedford University of London
Scope: CFRF 2-12-16-32 Woodgroove panel's
Veneer: Oak



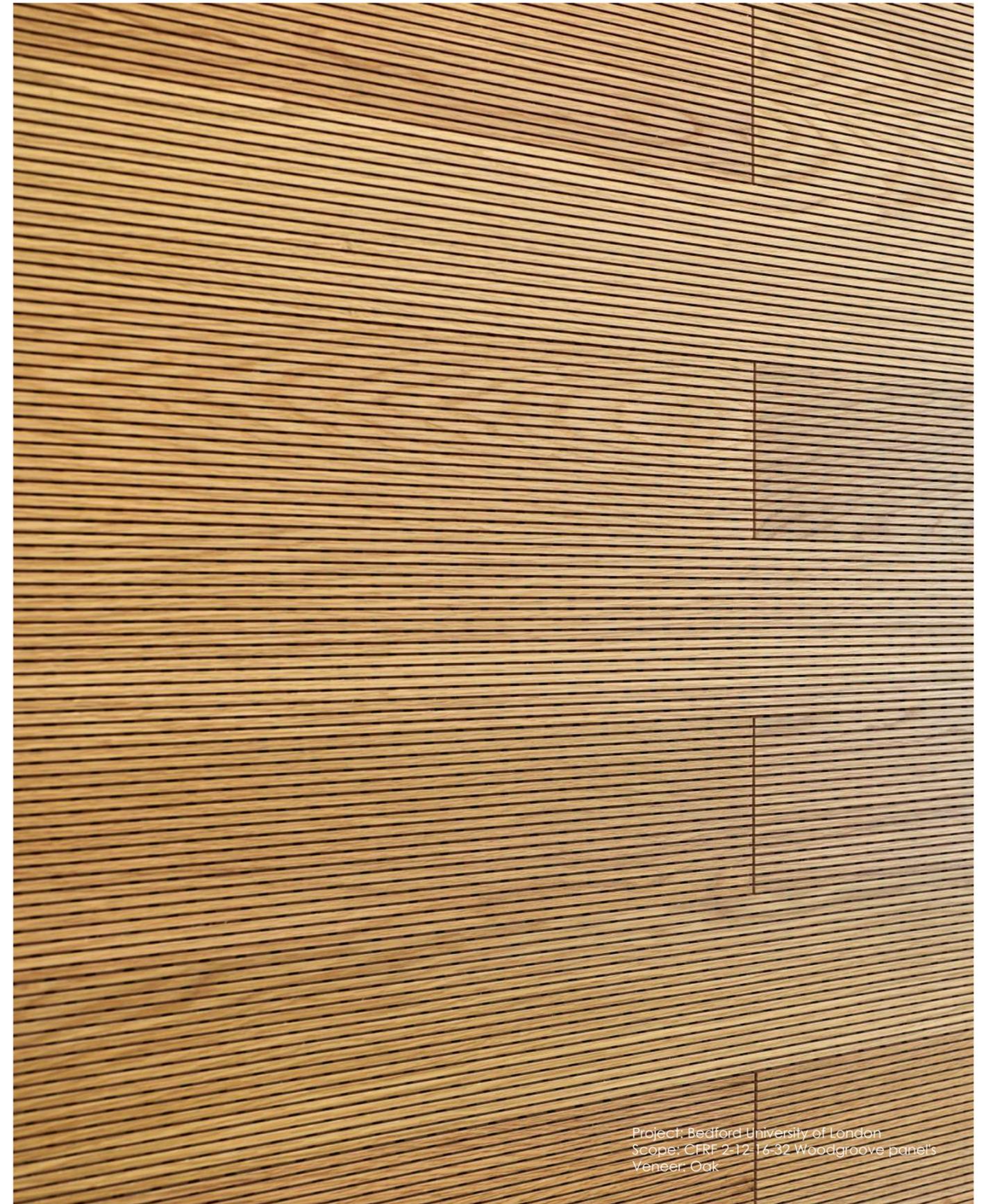
2 TYP. OUTSIDE CORNER (solid edge panel)
SCALE: 1:100

TYPICAL NOTE:
TRIM TO BE FACE NAILED OR GLUED TO BLOCKING/
FURRING, AND FINISH WITH A COLOUR MATCH WOOD
FILLER RECOMMENDED



3 TYPICAL INSIDE CORNER DETAIL
SCALE: 1:100

GENERAL NOTES: CUTTING PANELS ON SITE PANELS THAT ARE BEING CUT ON SITE REQUIRE FACE NAILING THROUGH TO FURRING, AND FINISHED OFF WITH COLOUR MATCH WOOD FILLER.



Project: Bedford University of London
Scope: CFRF 2-12-16-32 Woodgroove panels
Veneer: Oak



TYPICAL BAFFLE DATA (Custom widths / lengths also available upon request)

Size: Dimensions up to 2'-0" (600mm) depth x 9'-1.5" (2780mm) length

Thick: 0.75" (19mm)

Edge: Square edge

Fire Cert: Conform to CAN /ULC S102 Class 1/ ASTM-E84 Class: A

Mount: Suspension kit w/ adjustable grippers & aircraft cable included (Ceiling connection not included)

Baffles come pre-installed with 5 metal pieces installed on the top for ceiling suspension

Finish: Fire-retardant Clear Matt Finish

Veneer: FCS Certified Sliced Real Wood Veneer Veneer, 0.6 mm Quality AA

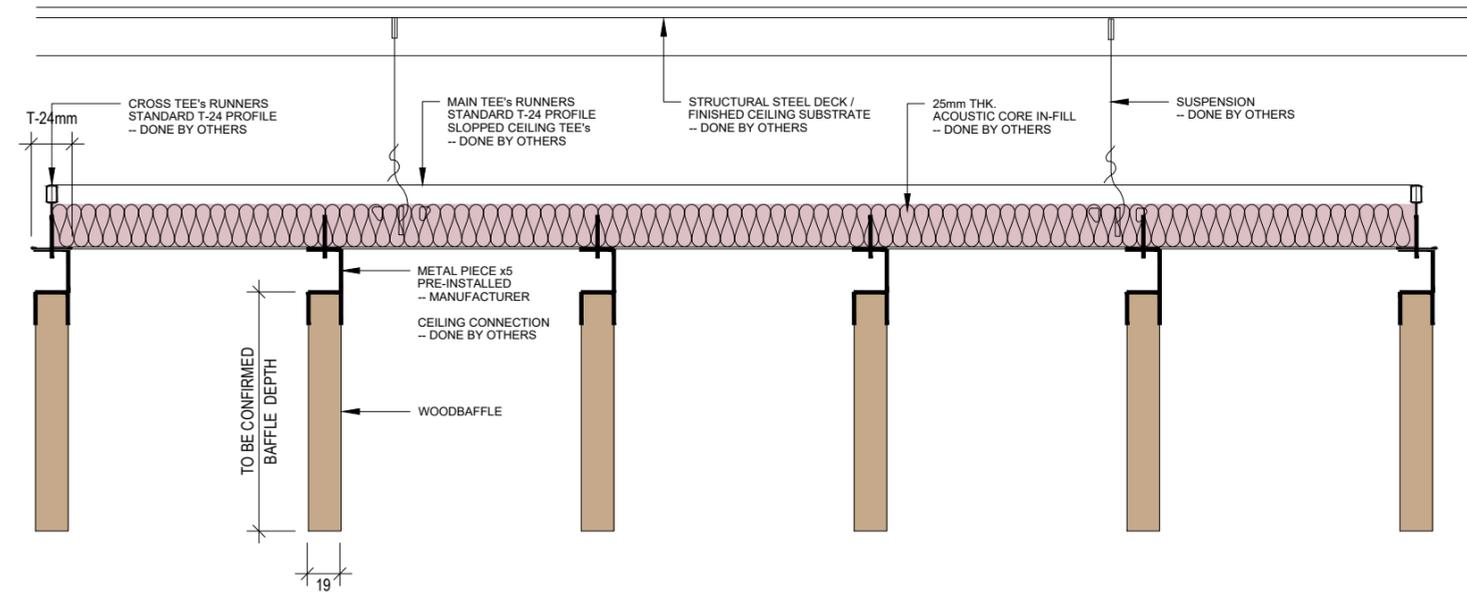
Custom staining options are available, RAL or NCS colour matching is also available



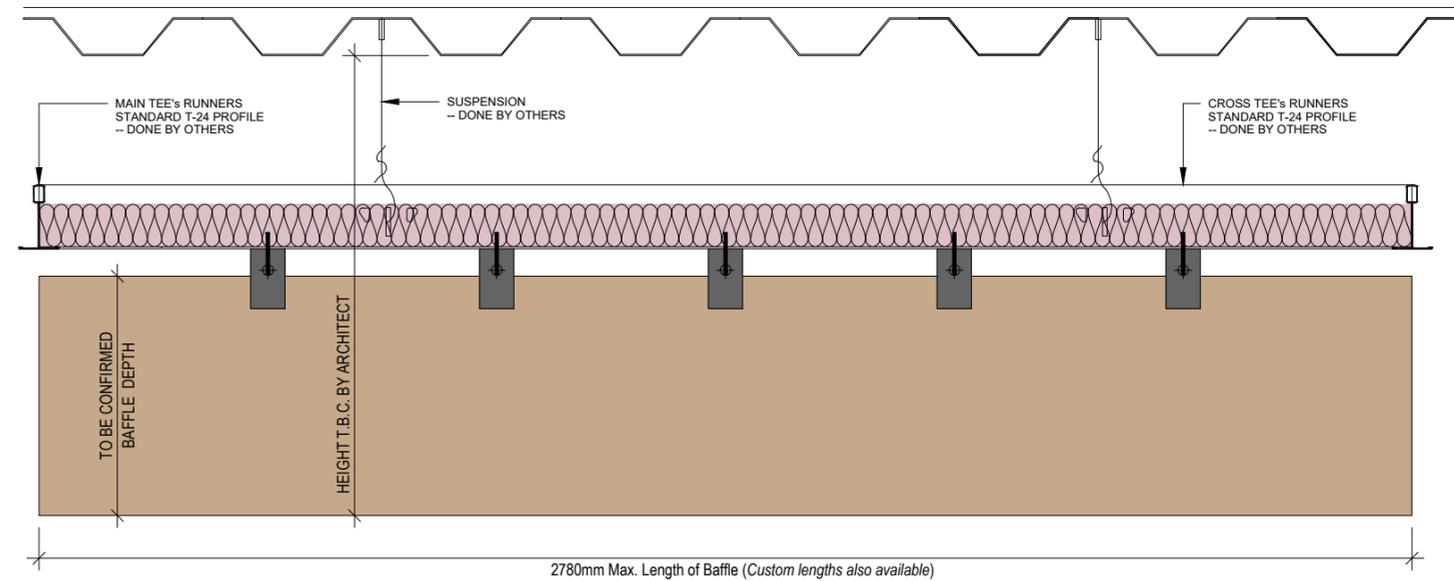
Beech Birch Maple Ash Oak



Walnut US Cherry



1 VERTICAL SECTION
SCALE: NTS



2 HORIZONTAL SECTION
SCALE: NTS

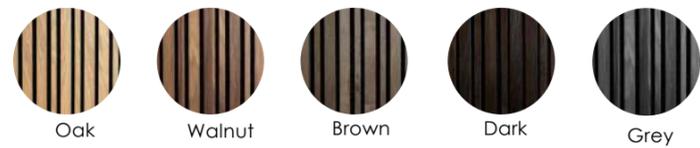
WOOD STRIPE

Introduce warm tones or Scandinavian aesthetic charm to any space while simultaneously minimizing echo and enhancing acoustics. Each woodstripe panel arrives fully assembled, with slats firmly attached to a hard felt backing, ready for easy installation. The panels can be easily cut on site, enabling unique combinations and complete customization. The tongue-and-groove design of the panels enables seamless side-by-side installation, creating a continuous slat wall without vertical seams or gaps.

Behind the wood slats is 0.5" thick PET felt, made from recycled water bottles and fully recyclable. This backing secures the slats permanently in place and simplifies the installation process.

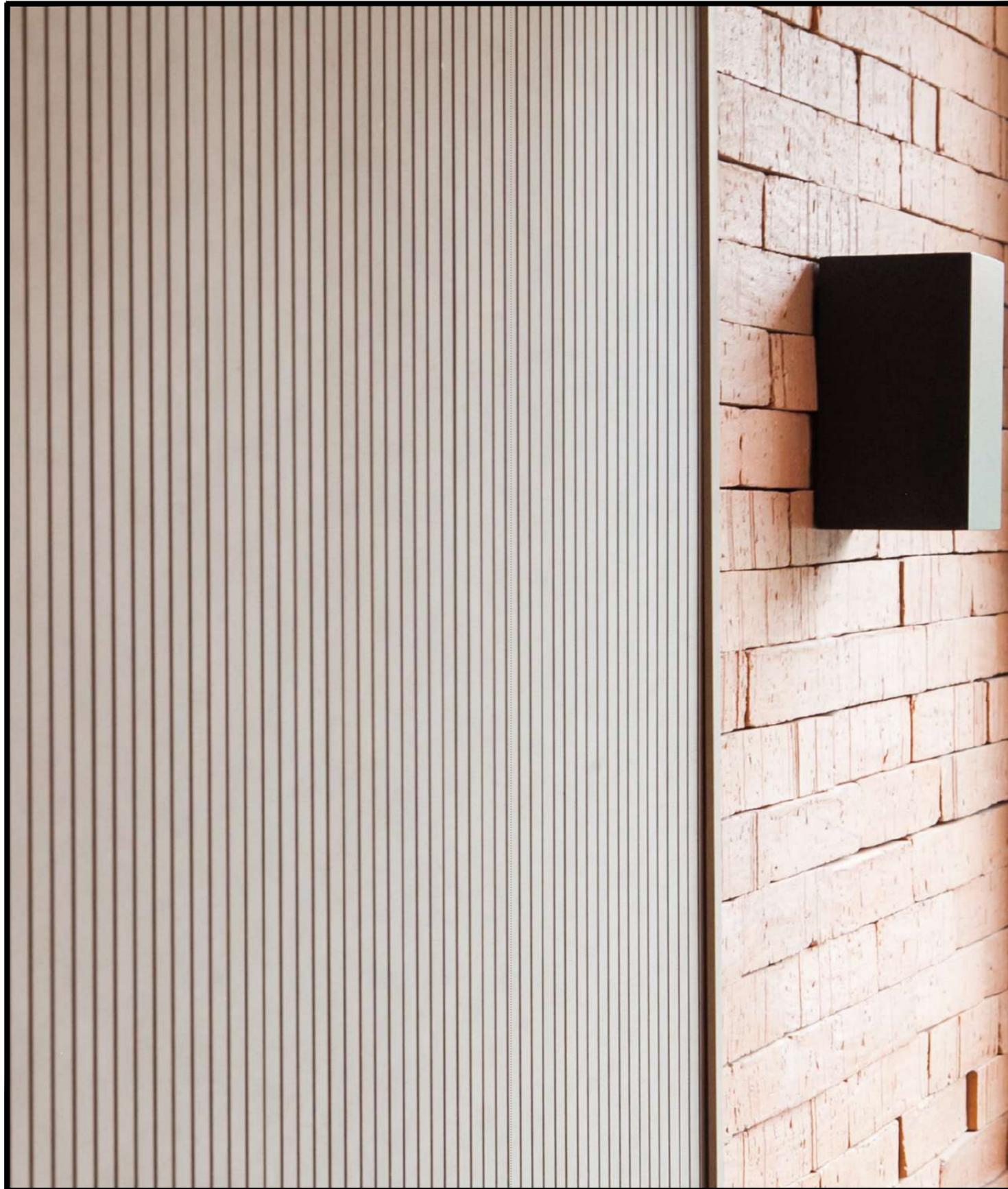
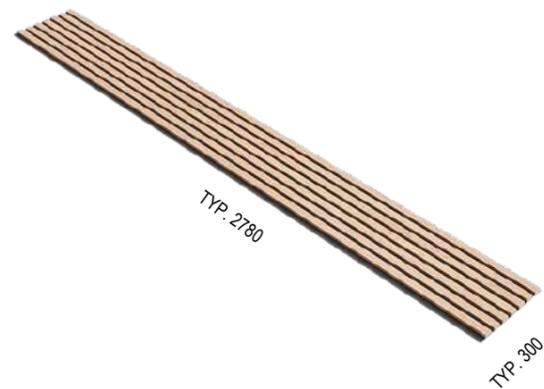
Custom staining options, RAL or NCS colour matching also available. Manufacturer's standard is Mis-matched (random order) veneer.

Over 60 species of wood available:



TYPICAL PANEL DIMENSIONS (Custom lengths available)

Size (W x L): 300 x 1220 | 2440mm | 2780mm MAX.
Thickness: 25mm



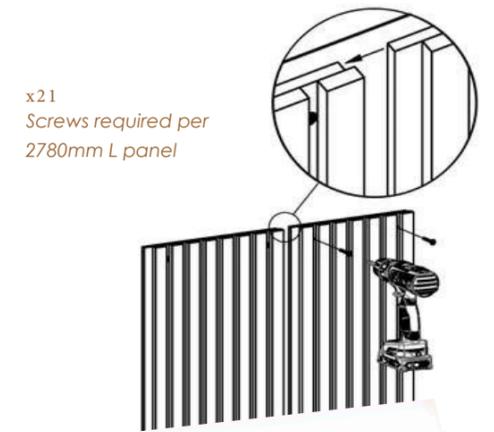
ACOUSTIC PERFORMANCE DATA:

Woodstripe panels have thoroughly been ALFA-W & NRC tested

MODULES TESTED	PLENUM + WOOL	ALFA-W	NRC
WS-9-9-24-13	40mm	0.90	0.88
	25mm	0.80	0.81
	12mm	0.65	0.76
	0mm	0.60	0.60
WS-7-14-29-13	40mm	0.95	0.89
	25mm	0.80	0.80
	12mm	0.65	0.76
	0mm	0.60	0.60

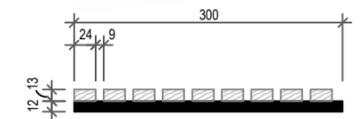
INSTALLATION:

To install, simply position the panel(s) in the desired location and drill through the felt into the chosen surface. The panels appear built-in, yet can be removed in seconds if needed, leaving minimal damage behind.

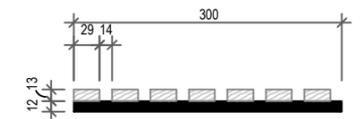


x21
Screws required per
2780mm L panel

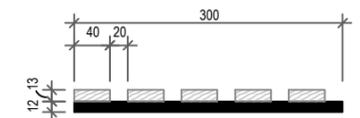
WS-9-9-24-13



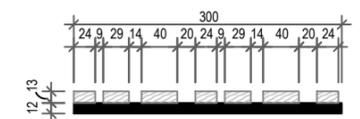
WS-7-14-29-13



WS-6-20-40-13



WS Random



STORAGE / HANDLING



STORAGE: All Veneered wood panels/elements should be stored in a dry interior location and shall remain in the original packaging prior to installation and avoid damage. Never stack pallets of wood elements on top of each other.



PANELS: Are packed on wooden pallets and should be stored in a conditioned space. Do not store in unconditioned spaces with humidity at 55% and no more than +/-15% fluctuation.



TEMPERATURE: Store panels/elements in a room with a temperature between 16 to 22 degrees Celsius. These temperature and humidity conditions must be met throughout the lifetime of panels.



HANDLING: Use proper care when handling to avoid damage. Never store the panels/elements directly on the floor. The panels/elements are maintenance free, but can be cleaned with a soft, damp cloth. The use of soaps of any kind is not advised.



SITE CONDITIONS: The site location where the panels will be installed should be free of construction dust and debris. All wet work such as plastering, concrete and painting is required to be completed and dried.

INSTALLATION INSTRUCTIONS

Prior to installation, acoustical wood panels should be acclimatized for a minimum of 24-48 hrs.

INSTALLATION: Can start only in a controlled environment where the temperature and the humidity conditions have reached the standard occupancy conditions. Humidity should not exceed 65%.

Since veneer is a natural product with natural colour and structure variations, it is advised that acoustical wood panels be sorted before assembly to ensure uniformity.

Acoustical wood panels to be installed on heavy gauge T-Grid or installed directly to metal/timber furring spaced according to panel sizes.

Prior to mounting panels, ensure furring is plum and level.

Secure panels with manufacturer-supplied clips at T-Grid/furring points along the mounting groove no less than 305mm from the ends, and 610mm along their lengths.

It is recommended to leave a 2 mm gap between panels, which meet at short ends, to allow for potential expansion/contraction, as new construction settles.

Acoustic wood panels to be installed by qualified installers only.

The methods described in this document are provided as guidance only. Relevant national building and installation codes should be strictly followed and take precedence.

Manufacturer is not responsible for any damage or deficiency caused by improper installation.

A typical detail drawing package is available for each project upon order.

FCB-CB'J 9B 99F '98; EBANDING -BGFI 7HCBG

All MDF edges should be perfectly clean and dust free in order to achieve good adhesion of the edging strip.

The edging should be applied using a normal domestic iron set at medium temperature with no steam.

A cloth or sheet should be used between the edging and the iron for protection.

Starting at one end, run the iron up and down the edging several times until it is bonded using a cloth covered block rib with some pressure to ensure a good bond.

Practice with an off cut before applying the edging to a panel that will be installed on the project.

Edgings might be slightly wider than the panel(s) they are being applied to. Once bonded, there are several ways to clean up the edges.

If the edges are only slightly proud, a sanding block with very fine sand paper will work well.

If there is more material overlapping, it can be trimmed with a sharp knife and then sanded as above.



CONTACT US



Solutions Acoustiques



Download catalog



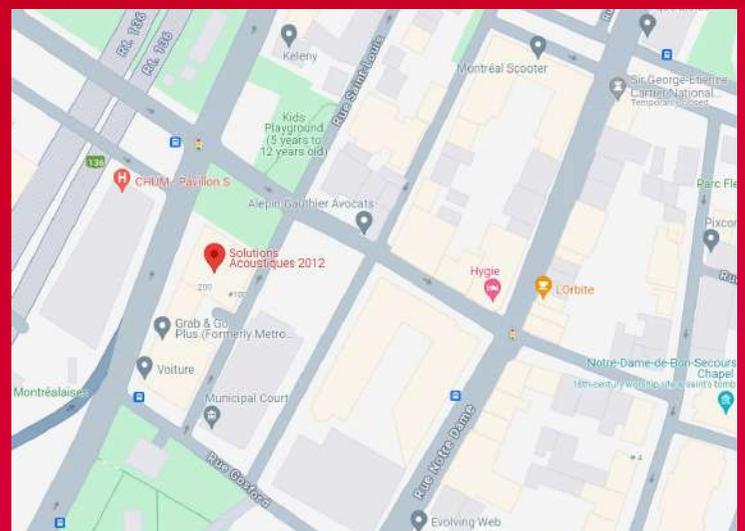
Instagram



reception@solutionsacoustiques.com



LinkedIn



338 St-Antoine Est, Suite 201, Montréal (Quebec) H2Y 1A3