USG Ceiling Solutions

### USG TRUE® WOOD PANELS

**INSTALLATION GUIDE** 



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USG True<sup>®</sup> Wood Panels, FL Edge, 30"x60", in Beech. Marino Jeantet Elementary School, New York, NY Architect: Murphy, Burnham & Buttrick Architects, Photo: @Frank Ouderman

## USG TRUE<sup>®</sup> WOOD

PANELS

CHOOSE YOUR SYSTEM	USG True® Wood Lay-In panels work just like traditional acoustical panels. Available in many woo finishes and four perforation patterns.				
	USG True <sup>®</sup> Wood Accessible Reveal panels install on a traditional suspension system and provide a clean, uninterrupted wood ceiling with complete access to the plenum. Available in many wood finishes and four perforation patterns.				
	USG True® Wood Linear planks are available in a variety of finishes and install directly to USG drywall grid system, making it great for large open spaces.				
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	Web Site usg.com				

# SYSTEM OVERVIEW

USG TRUE* WOOD SYSTEMS	USG True <sup>®</sup> Wood Lay-In panels work just like traditional acoustical panels. Available in many wood finishes and four perforation patterns.
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	USG True <sup>®</sup> Wood Linear planks are available in a variety of finishes and install directly to USG drywall grid system, making it great for large open spaces.
SIZES	USG True $^{\scriptscriptstyle \otimes}$ Wood Lay-In panels and Accessible Reveal panels come in 2' x 2' and 2' x 4' sizes as a standard.
	Plank size panels (2' x 6', 2' x 8', 20" x 60", 30" x 60") require Reinforcement Angles (included with each panel for field assembly).
	USG True® Wood Linear planks come in nominal 4" x 96" and 6" x 96" plank sizes and install with a 3/4 inch gap. They can also be installed with no gap, edge to edge.
SUSPENSION SYSTEM	USG True® Wood Lay-In is available for both 15/16″ USG Donn® Brand DX®, 9/16″ Centricee™ and 9/16″ Fineline® suspension systems. All Lay-In tiles have a 5/16″ Shadowline or Fineline edge standard. Panels may be field-cut at wall and columns but otherwise should be used in full modules.
	USG True® Wood Accessible Reveal tiles install on to 15/16" USG Donn Brand DX grid only, the reveal created by the abutting tiles leaves a 3/8" gap that conceals the suspension system. Accessible Reveal tile should be used in full modules, but provisions can be made to accommodate field-cut conditions.
	USG True® Wood Linear is fastened directly to drywall suspension system, and special considerations have to be taken for access and field-cut conditions.
PERIMETER DETAILS	Optional USG Compässo™ trim may be used with USG True® Wood Lay-In and Accessible Reveal ceilings for a finished appearance at exposed edges. See brochure IC400 in the USG Specialty Ceilings Binder for more information.
	USG True® Wood perimeter trim can be used with all USG True® Wood systems to ensure a panel species and perimeter trim wood species match.
ACOUSTICAL PERFORMANCE	Perforated Lay-In and Accessible Reveal panels with a Acoustibond™ sound backer achieve .60 NRC when installed in an enclosed plenum (18″ depth min.). Available fiberglass backing provides even greater acoustical performance.
PROJECT CONDITIONS	Installation shall be done only when the temperature and humidity closely approximate the interior conditions that will exist when the building is occupied. The heating and cooling systems shall be operating before, during and after installation, with the humidity of interior spaces maintained between 25% and 55%.
	Building environmental conditions should be maintained in accordance with ASHRAE Standard 62.1, 2013.
	It is important that plenums have proper ventilation, especially in high moisture areas. There shall be no excessive buildup of heat in the ceiling areas.
	Prior to the start of installation, all exterior windows and doors are to be in place, glazed and weather-stripped. The roof is to be watertight, and all wet trades' work is to be completed and thoroughly dry.
	Refer to <i>CISCA Wood Ceilings Technical Guidelines</i> for best practices on installing wood ceilings. Mechanical, electrical and other utility service installations above the ceiling plane shall have been completed. No materials should rest against, or wrap around, the ceiling suspension components or connecting hangers.

DELIVERY, STORAGE AND HANDLING	USG True® Wood shall be delivered to the project site in original, unopened packages. USG True® Wood shall be stored flat and level in a fully enclosed space. The ceiling panels shall be stored off the floor. Care in handling must be exercised to avoid damage.
CUTTING PANELS	USG True® Wood panels should be cut face up. Eye protection should be worn. USG True® Wood may be cut with a variety of tools including table saws, circular saws, jig saws and hole saws. Please follow the safety instructions issued by the power tool manufacturer. A miter saw or table saw are the best choices for maintaining a clean, straight cut. For portable
	circular saws (Skilsaws®), use either 24 or 40 tooth carbide blades to cut USG True® Wood. For making holes for can lights, a hole saw is recommended. A jigsaw can also be used. Use fine tooth blades that are specified for cutting veneers.
SCRATCH REPAIR	A repair kit (foam brush and stain) is included with each USG True® Wood order. This kit can be used after installation is complete and should be left with the building owner.
MATERIAL LIST	<ul> <li>#8 1/2" wood lath screws</li> <li>1-1/4" fine threaded drywall screws</li> <li>Large spring clamps</li> <li>Miter saw</li> <li>Table saw or circular saw</li> <li>Jig saw</li> <li>Hole saw and drill</li> <li>Nail set</li> <li>Hole punch</li> <li>1-1/4" trim nails</li> <li>MAC2 clips</li> <li>Can of black spray paint</li> </ul>

#### USG TRUE® WOOD PRODUCTS ARE FSC® CERTIFIED

FSC stands for the Forest Stewardship Council<sup>®</sup>. FSC certification is a voluntary, market-based tool for forest conservation. Consumer demand for FSC-certified products encourages more responsible forest management. FSC tracks products from forest to job site. Products that are responsibly harvested and/or from verified recycled sources are identified with the FSC logo.

#### LAY-IN PANELS



View from Above



#### ACCESSIBLE REVEAL











## LAY-IN COMPONENTS



ACCESSORIES



Wood Panel Reinforcement Angle (Reinforcement Angles are included with panels for field assembly)



#### PANEL OPTIONS

Size		2' × 2' 2' × 4' 2' × 6'	2' x 8' 20" x 60" 30" x 60"	20" x 60"	
Edge Detail		FL	SL		
Perforation	s (see page 2	26)			
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
0	$\bigcirc$	0	$\bigcirc$		

#### ACOUSTICAL PERFORMANCE

Perforated Lay-In panels come standard with a black, factory-applied Acoustibond<sup>™</sup> backer for enhanced sound performance. The Acoustibond<sup>™</sup> backer is included on all perforated panels unless otherwise specified. This backer is also available in white. For even greater acoustical performance, fiberglass backing is available.

Perforation	Open Area	NRC	
W100	10%	.60	
W200	3%	.30	
W300	20%	.70	
W400	5%	.40	
W500 Channels	N/A	N/A	
W600 Channels	N/A	N/A	



#### SUSPENSION SYSTEMS

## LAY-IN APPLICATIONS

#### PERIMETER DETAILS



#### TRIM DETAILS

Optional USG Compässo<sup>M</sup> edge trim in 2-1/4", 4", 6", 8", 10" and 12" heights may be added for a finished appearance at exposed edges.





Optional True Wood Trim





Wood Panel Reinforcement Angle



### **ACCESSIBLE REVEAL** COMPONENTS



#### PANEL OPTIONS

Size			2' x 2 2' x 2	
Edge Detail			AR	AR
Perforation	is (see page	26)		
0	$\bigcirc$	0	$\bigcirc$	
0	0	$\bigcirc$	$\bigcirc$	
0	$\bigcirc$	$\bigcirc$	$\bigcirc$	

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W600 Channels	N/A	N/A	

#### SUSPENSION SYSTEMS



#### PANEL INSTALLATION



#### PANEL INSTALLATION

#### How to remove USG True<sup>®</sup> Wood concealed panel.





### **ACCESSIBLE REVEAL** APPLICATIONS

#### PERIMETER DETAILS



#### Retention Clips (Required)



ceiling grid –

Section View - carabiner clip attachment clip TRIM DETAILS

Optional True Wood Trim



#### (On/Off Module) DX®



## LINEAR COMPONENTS

#### LAY-OUT AND SITE PREPARATION USG True® Wood linear planks come finished on four sides with veneer and stain (if applicable). The two short ends or butt ends are not finished, and proper care must be taken to assure these ends are either hidden or treated in the field to match the exposed face. USG True® Wood linear plank system installs on USG Donn® Brand Drywall Suspension System, and the typical layout for this system is Main Tees (DGLW26) installed 4 feet on center hung every 4 feet along the main and cross tees installed every 4 feet between the mains. For USG True® Wood linear system, the linear planks are screw attached to the cross tees and run parallel to the main tees. USG True® Wood linear planks are installed in a progressive fashion with the aesthetic felt toward the direction of the install. The spacing of the planks can be from zero to 7/8" of an inch. Great care should be taken to maintain the same spacing, and blocks or gauges should be used. Some portion of the grid may be exposed. These areas should be treated in the field with flat black paint that is suitable for galvanized material and the environment of the installation. **PLANK INSTALLATION** USG True® Wood linear planks are screw attached with 1/2 wood lath screws from the back of the ceiling through the flange of the cross tee and into the plank. It is critical that the attachment of the planks be secure and that the fasteners are not "overdriven." In some cases it may be necessary to prepunch the grid flange to assure connection integrity. Use spring clamps to position the plank in place and assure its spacing and alignment. Splice Plates: Place butt joints over framing members. Otherwise, framing angle or wood can be used as a splice plate. Plan on using at least four 1/2" wood lath screws, two on each side of the splice. True Wood can be used with a biscuit joiner as well to join butt ends. Cutting butt ends at a 22-degree angle lessens the chance of seeing the exposed edge of the panel line. **FINISHING AND TOUCH UP** Touch-up kits can be supplied by USG, but similar material can be obtained from a local retailer that

carries wood finishing products. A sample should be tested for match and consistency.

#### PANEL



#### TRIM



#### LINEAR PLANK OPTIONS

Size	3-3/4" x 96" 5-1/4" x 96"
Edge Detail	SQ
DWSS tee	

#### SUSPENSION SYSTEMS



Nonwall or Floating Condition with Trim



Note: Preattach wood blocks first

- USG True® Wood linear plank

main tee

· cross tee - trim

Nonwall Floating Condition without Trim





#### Prepunch grid



#### Alternate Screws



#### Splice Options



#### Wall Termination





Note: Approximately last three linear planks attached to wood blocking with wood finishing nails

#### Access Door



Barrel Vault



#### TRIM DETAILS

#### Optional USG True<sup>®</sup> Wood Trim



#### Trim with Reveal



Trim without Reveal



### **USG TRUE® WOOD** PERFORATIONS

#### Pattern W100

Pattern W300

**ROUND HOLES** 

(PATTERNS SHOWN AT 40%)

### 

Pattern W200



Round—6 mm perforations 32 mm o.c., 3% open area

Round-6 mm perforations 16 mm o.c., 10% open area





Round-8 mm perforations 32 mm o.c., 5% open area

Round—8 mm perforations 16 mm o.c., 20% open area

#### Pattern W500 (with border)

#### Pattern W600 (with border)



**USG TRUE® WOOD** FINISHES

Printed and/or online color swatches are only reproductions of actual standards and will vary in appearance due to differences in monitor and printer output. These representations should not be used to finalize color selection(s).



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#### PLAIN-SAWN

**VERTICAL GRAIN** 

### **APPLICATION GUIDE** SPECIFICATIONS

Drawings and general provisions of the Contract, including General and Supplementary Α. 1.01 REFERENCES Conditions and Division 1 Specification Sections, apply to this Section. 1.02 A. ASTM C635, Standard Specifications for Metal Suspension Systems SUMMARY ASTM C636, Recommended Practice for Installation of Metal Suspension System В. ATSM E84, Standard Test Method for Surface Burning Characteristics of С. **Building Materials** CISCA Ceiling Systems Installation Handbook D. CISCA Wood Ceilings Technical Guidelines Ε. 1.03 Α. Section Includes: **RELATED DOCUMENTS** 1. Acoustical ceilings panels 2. Exposed grid suspension system 3. Wire hangers, fasteners, main runners, cross tees and wall angle moldings Related Sections include the following: B. 1. Section 01 41 13 (01450) - Codes 2. Section 01 45 33 (01450) - Code-required Special Inspections and Procedures 3. Section 09 20 00 (09250) - Plaster and Gypsum Board 4. Division 23 (15) - HVAC 5. Division 26 (16) Sections - Electrical Work 1.04 Samples: Submit panel finish and suspension system main and cross tees Α. SUBMITTALS for acceptance. Β. Shop drawings: 1. Reflected ceiling plans: Submit ceiling suspension system layout indicating dimensions, lighting fixture locations and related mechanical components. 2. Assembly drawings: Indicate installation details, accessory attachments and installation of related lighting fixtures and related mechanical system components. 3. Samples: Minimum 4 inch x 6 inch samples of specified acoustical panel; 8-inch-long samples of exposed wall molding and suspension system, including main runner and 4 foot cross tees. С. Manufacturer's data: 1. System details: Submit manufacturer's catalog cuts, literature or standard drawings showing details of system with project conditions clearly identified and manufacturer's recommended installation instructions. D. Maintenance materials: Provide % of amount of main tees, cross tees and panels. 105 Delivery of materials: Deliver materials in original, unopened packages, clearly labeled with Α.

manufacturer's name, item description, specification number, type and class as applicable.

### DELIVERY, STORAGE, AND HANDLING

1.05 DELIVERY, STORAGE AND HANDLING CONT.	<ul> <li>B. Inspection: Promptly inspect delivered materials, file freight claims for damage during shipment, and order replacement materials as required. Any damaged materials shall be promptly removed from the job site.</li> <li>C. Storage: Store in manner that will prevent warpage, water damage or damage of any kind. Prevent interference to/by other trades and any other adverse job conditions due to storage locations or methods. Refer to <i>CISCA Wood Ceilings Technical Guide</i> for best practices on installing wood ceilings.</li> <li>D. Handling: Handle in such a manner as to ensure against racking, distortion or physical damage of any kind.</li> </ul>
1.06 QUALITY ASSURANCE	<ul> <li>A. Subcontractor qualifications: Installer shall have not less than three years of successful experience in the installation of ceiling suspension systems on projects with requirements similar to requirements specified.</li> <li>B. Requirements of regulatory agencies: Codes and regulations of authorities basis of authorities</li> </ul>
	<ul> <li>having jurisdiction.</li> <li>C. Delete paragraph below if not required. If retaining, indicate location, size and other details of mockups on Drawings or by inserts. Revise wording if only one mockup is required.</li> <li>D. Source quality control: Manufacturer will provide test certification for ceiling system as required to meet industry performance standards specified by various agencies.</li> <li>E. Delete below if work of this Section is not extensive or complex enough to justify a preinstallation conference. If retaining, coordinate with Division 1 Section "Project Meetings."</li> <li>F. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Meetings."</li> </ul>
1.07 PROJECT CONDITIONS	<ul> <li>A. Building conditions: Building shall be enclosed with all windows and exterior doors in place and glazed, and the roof watertight before installation of suspension system.</li> <li>B. Interior temperature/humidity in building: Climatic conditions in areas to receive ceiling suspension systems shall range from 60°F (16°C) to 85°F (29°C) and relative humidity of not more than 55% shall be maintained before installation of components.</li> </ul>
1.08 EXTRA MATERIALS	<ul> <li>Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.</li> <li>a. Ceiling Panels: Furnish quantity of full-size units equal to% of amount installed.</li> </ul>
2.01 PRODUCTS AND MANUFACTURERS	<ul> <li>A. USG True<sup>®</sup> Wood ceiling panels:</li> <li>a. PART 1 - USG True<sup>®</sup> Wood ceiling panels will be made with a [veneer species] face veneer, applied to a 3/4" thick core material. The edge treatment on the USG True<sup>®</sup> Wood panels shall be the [selected style]. The standard USG True<sup>®</sup> Wood ceiling panel shall be 3/4" thick and [selected size] (nominal). Wood is a natural product that will undergo changes with variations in the environment. Therefore, all dimension tolerances shall be ± 1/8".</li> <li>B. Accessories: <ul> <li>a. Wall molding: [M9:15/16"x9/16"x12', M7:7/8"x7/8"x12']—long angle shape of prepainted steel.</li> <li>b. Wood panel retention clip :WDRC</li> <li>c. Panel Fixing Bracket (PF B)</li> <li>d. Edge Trim: Optional; USG Compässo [Selected Size]</li> <li>e. Anti-warp bar</li> </ul> </li> </ul>

2.02 A. METAL SUSPENSION SYSTEMS		<ul> <li>USG Donn<sup>®</sup> Brand Suspension Systems—Commercial quality, cold-rolled steel, hot-dipped galvanized steel body. Materials Exposed surfaces color: Coordinate with color of selected ceiling panels.</li> <li>a. [USG Donn<sup>®</sup> Brand DX<sup>®</sup> 15/16" suspension System] <ol> <li>Main Tee : DX/DXL26, 12 ft x 1.64 in Heavy Duty Fire-Rated</li> <li>Cross Tee: DX/DXL216, 2 ft x 1 in (for 2' x 2' only)</li> </ol> </li> <li>b. [USG Donn<sup>®</sup> Brand Fineline<sup>®</sup> DXFTM/DXLF<sup>™</sup> Ceiling Suspension System] <ol> <li>Main Tee: DXFH2924, 12 ft Main Tee Notch 24 in on center</li> <li>Cross Tee: DXF429, 4 ft Cross Tee (2' x 4' only)</li> <li>Cross Tee: DXF429N, 4 ft Cross Tee (2' x 2' only)</li> </ol> </li> <li>c. [USG Donn<sup>®</sup> Brand Centricitee<sup>™</sup> DXT<sup>™</sup>/DXLT<sup>™</sup> Ceiling Suspension System] <ol> <li>Main Tee: DXF229, 2 ft Cross Tee (2' x 2' only)</li> </ol> </li> <li>c. [USG Donn<sup>®</sup> Brand Centricitee<sup>™</sup> DXT<sup>™</sup>/DXLT<sup>™</sup> Ceiling Suspension System]</li> <li>Main Tee: DXT26, 12 ft x 1.64 in Heavy Duty</li> <li>Cross Tee: DXT424, 4 ft x 1-1/2</li> <li>Cross Tee: DXT424, 4 ft x 1-1/2</li> <li>Cross Tee: DXT424, 4 ft x 1-1/2</li> <li>Cross Tee: DXT22, 2 ft x 1-1/2 (2' x 2' only)</li> </ul>		
3.01 EXAMINATION	А. В. С.	with maximum deflection of 1/360. Examine substrates and structural framing to which ceiling systems attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage, and other conditions affecting performance of ceiling systems. Proceed with installation only after unsatisfactory conditions have been corrected. Work to be concealed: Verify work above ceiling system is complete and installed in manner that will not affect layout and installation of system components.		
3.02 PREPARATION	А. В.	Coordination: Furnish layouts for cast-in-place anchors, clips and other ceiling anchors whose installation is specified in other Sections. Measure each ceiling area and establish layout of three-dimensional ceiling systems. Comply with layout shown on reflected ceiling plans.		

C. Field dimensions: Installer must verify actual field dimensions prior to installation

#### 3.03 INSTALLATION

#### A. Ceiling Framing:

- 1. Standard reference: Install grid members in accordance with ASTM C636, CISCA installation standards and other applicable references.
- 2. Manufacturer's reference: Install in accordance with manufacturer's current printed recommendations.
- 3. Drawing reference: Install in accordance with approved shop drawings and locate ceiling in accordance with main tee dimensions relative to elevations.
- 4. Hanger Wire Installation: Secure hanger wires to upper structural elements and space hangers so each hanger wire supports a maximum of 16 sq. ft.
- 5. Space main tee members a maximum span of 48'' on center. Space cross tees to achieve a 2' x 2' grid for 2' x 2' panels or 4' x 4' grid for 4' x 4' panels.
- B. Ceiling Panels
  - 1. Preparation: Remove dirt and debris from surrounding area. Comply with manufacturer's written instructions.
  - 2. Install ceiling panels in accordance with approved shop drawings
- A. Suspension system: Remove infill material and perform any necessary cleaning maintenance with non-solvent-based commercial cleaner.
- **B.** Touch up all minor scratches and spots, as acceptable, or replace damaged sections when touch up is not permitted.
- **C.** Painting: Repainting of suspension members shall be with a high-quality solvent base paint and applied as recommended by paint manufacturer.
- D. Removal of debris: Remove all debris resulting from work of this section. Clean exposed surfaces of ceiling systems. Comply with manufacturer's written instructions for cleaning and touch up of minor finish damage. Remove and replace ceiling system components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage, including dented and deformed members.
- 3.04 CLEANING

#### **PRODUCT INFORMATION**

See usg.com for the most up-to-date product information.

### **CUSTOMER SERVICE**

800 950-3839

### **TECHNICAL SERVICE**

800 USG.4YOU (874-4968) usg.com

### PRODUCT LITERATURE Data Sheet IC561

LIMITATIONS Interior applications only

NOTICE We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in any loss cause with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

#### SAFETY FIRST!

SARELITINS!! Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation.

