

DIVISION 10

SECTION 101100

VISUAL DISPLAY BOARDS

SERIES 100

A-1
VISUAL
SYSTEMS

SECTION 101100

SERIES 100

MARKERBOARDS

CHALKBOARDS

TACKBOARDS

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PRODUCT DATA SHEET

Series “100”

Institutional Trim System for MarkerBoards, ChalkBoards and TackBoards.

Suggested Specification

PART I - GENERAL

I.1 SECTION INCLUDES

- A. Porcelain-on-Steel Markerboards.
- B. Porcelain-on-Steel Chalkboards.
- C. Vinyl Cork Tackboards.
- D. Visual Display Board Accessories.

I.2 RELATED SECTIONS

- A. Section 06100 – Wood or Steel Blocking.
- B. Section 09000 – Gypsum Wall Board.
- C. Section 09720 – Vinyl Wall Coverings.
- D. Section 09900 – Paints and Coatings..

I.3 REFERENCES

- A. ASTM B221 – Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- B. ASTM E84 – Test Method for Surface Burning and Characteristics of Building Materials.
- C. ASTM C540 – Gloss Test for Porcelain Enamel Steel (Porcelain Enamel Institute PEI-501).

I.4 SUBMITTALS

- A. Submit products and samples under provisions of Section 01300.
- B. Product Data: Provide technical data for products specified. Include Material Safety Data Sheets, when applicable.
- C. Shop Drawings: Provide shop drawings for each type of visual display board specified including section details indicating trim, face, core and backing materials, wall elevations, dimensions, joint locations and special anchor details.
- D. Color Samples: Submit set of color chips displaying manufacturer's full range of colors and finishes.
- E. Product Samples: Submit samples not less than twelve inches square and framed on two adjacent sides, to illustrate materials, finish, color, and configuration of each type of visual display board required.
- F. Care and Maintenance Data: Provide data on cleaning requirements, stain removal and recommended maintenance precautions.

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1.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturer's instructions for handling and storage of Visual Display Boards.

1.6 PROJECT CONDITIONS

- A. Field measure prior to preparation of shop drawings and fabrication to ensure proper fit.
- B. General contractor to maintain proper climate before, during and after installation.

1.7 WARRANTY

- A. Submit manufacturer's "Life of Building" warranty, stating that under normal usage and maintenance, and when installed in accordance with manufacturer's instructions and recommendations, Porcelain-on-Steel Markerboards and Chalkboards are guaranteed for the life of the building.
- B. Warranty shall cover replacement of defective Porcelain-on-Steel Markerboards and Chalkboards due to discoloration, excessive fading of color, crazing, cracking or flaking. Warranty does not cover the cost of removal or reinstallation.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Provide visual display boards as manufactured by:
A-I Visual Systems
16221 S. Maple Avenue, Gardena, California 90248
T - 800/423-3386 F - 562/927-2500
E - sales@a-1visualsystems.com
W - a-1visualsystems.com

2.2 MARKERBOARD AND CHALKBOARD MATERIALS

- A. Steel Face Sheets: Writing surface will be ALLIANCE WALL "e3" steel face with porcelain enamel finish fused to the steel sheet using a continuous coil process.
 - a. Markerboard and Chalkboard surface shall be fused at a temperature of 1450 degrees and 1200 degrees respectively.
 - b. The gloss of the writing surface will not increase more than three units when subjected to wearability tests specified in testing procedures for 30 hours.
- B. Core Material: 1/2 inch particle board.
- C. Backing Material: 0.005 inch aluminum foil.
- D. Metal Trim and Accessories: 6063 aluminum alloy with a T5 temper.
- E. Adhesive: As recommended by manufacturer for project conditions.

2.3 PORCELAIN ON STEEL MARKERBOARDS AND CHALKBOARDS

- A. Provide Markerboards and Chalkboards for project from manufacturer's Series "300".
 - I. Metal trim and accessories: Series "300" aluminum extrusions with clear satin anodized finish.
 - a. Chalktray: TRAY 205: Standard continuous "Blade Type" tray.

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- b. Maprail MR301: Standard 1" high continuous rail with natural cork insert as follows:
 - 1) Endstops: One pair per maprail.
 - 2) Map hooks: One every 2' of maprail.
 - 3) Flag holder: One per room.
 - c. Frame #113: EASY-MOUNT channel frame with 1 1/2" face.
 2. Size: As shown on drawings.
 3. Color: As selected from manufacturer's standard colors.

2.4 VINYL CORK TACKBOARD MATERIALS

- A. Vinyl Face Sheets: Vinyl surface will be Type II self-healing, weighing not less than 21 ounces per lineal yard. Pattern to be a Harborweave.
 1. Vinyl shall be washable and mildew resistant.
- B. Core Material: 1/4 inch natural cork underlayment.
- C. Backing Material: 1/4 inch hardboard.
- D. Metal Trim: 6063 aluminum alloy with a T5 temper.
- E. Adhesive: As recommended by manufacturer for project conditions.

5. VINYL CORK TACKBOARDS

- A. Provide Tackboards for project from manufacturer's Series "100".
 1. Metal trim and accessories: Series "100" aluminum extrusions with clear satin anodized finish.
 - a. Frame 103: Institutional channel frame with 5/8" face.
 2. Size: As shown on drawings.
 3. Color: As selected from manufacturer's standard colors.

2.6 FABRICATION

- A. Laminate facing sheet and backing sheet to core material under pressure, using manufacturer's recommended adhesive.
- B. Provide factory-assembled visual display boards, except where sizes demand partial field assembly.
- C. Assemble units in one piece without joints, wherever possible. Where required dimensions exceed maximum panel size available, provide two or more pieces of equal length, as indicated on approved shop drawings. Assemble to verify fit at factory, then disassemble for delivery and final assembly at project site.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verify that substrates are properly prepared to receive visual display boards. Do not begin installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's installation instructions.
- B. Where visual display boards must be partly assembled at project site, use factory-

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- supplied H-bar to maintain proper alignment.
- C. Install visual display boards level and plumb, keeping perimeter trim aligned in accordance with manufacturer's recommendations.

3.3 ADJUSTING AND CLEANING

- A. Verify that all accessories are installed as required for each unit.
- B. Upon completion of installation, clean surfaces and trim in accordance with manufacturer's recommendations, leaving all materials ready for use.

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MAINTENANCE & CLEANING

PORCELAIN-ON-STEEL
MARKERBOARDS &
CHALKBOARDS

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Maintenance and Cleaning **Porcelain-On-Steel Writing Surfaces**

To maintain aesthetics, it is important to clean the markerboard during and after construction.

For routine cleaning, use a soft, clean, grit-free cloth.

To remove tough inks and “Permanent Markers” use a soft microfiber cloth with denatured alcohol and rinse immediately with clean water and remove any excess water from the board surface.

Do not allow any metal or hard parts of the cleaning equipment to contact the board surface.

Do not use solvents or ammonia-based cleaners. The use of cleaning solutions other than those recommended in this document is at the client’s own risk. Harsh scrubbing and/or abrasive cleaners may damage the finish and void your warranty.

Handle all markerboard products with clean gloves, and do not use suction cups on finished boards. Do not use tape or adhesives on finished surfaces.

Periodically check fasteners and tighten any loose screws.

Best results are attained when the board markers are at room temperature. Use pens designed for markerboard use only and store them horizontally. Keep cap tightly in place when not in use.

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MAINTENANCE & CLEANING

BURLAP WEAVE VINYL

Maintenance and Cleaning **Burlap Weave Tackable Surfaces**

Normal cleaning should be done with mild ingredients such as soap detergent and water. If sustained and stronger cleaning is required, liquid household cleaners such as Lestoil should be used.

The method of cleaning should be to rub briskly with a cloth or sponge and the detergent solution. If the pattern has a rough texture, a soft bristle brush should be used. Rinse with clean water and dry with absorbent cloth.

Repeated use of stronger cleaners will extract plasticizer from vinyl causing it to lose its suppleness.

Stains should be removed as quickly as possible as time is especially important for removing material containing colors or solvents such as ball point ink, nail polish, lipstick, paint...

**PRODUCT
WARRANTY**
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A-I Visual Systems' Magnetic Markerboard writing surfaces are guaranteed **for the life of the building** against manufacturer defect under normal conditions as determined by A-I Visual Systems and when proper cleaning and handling instructions have been followed. A-I Visual Systems warrants that the application will not vary from its original delivery color by more than 5 units in the Delta E scale and that the treatment will adhere to the board panel. Due to the distinct nature of decorative markerboards, some slight variations and minor irregularities may occur. A-I Visual Systems finishes are intended to be resistant to normal wear and tear as determined by A-I Visual Systems and may not be suitable for some applications.

In the event that the finished markerboard fails to meet this warranty, A-I Visual Systems will review to determine the cause of the defect relative to the warranty and, at its option, repair or replace the affected markerboard. Replacement boards will ship FOB the point of origin to which the original finished panels were supplied. The client is expected to inspect A-I Visual Systems' products for conformity design intent, application and design specifications prior to installation. A-I Visual Systems shall not be responsible for the cost of removal, reinstallation or other related costs or taxes regarding the defective materials.

The warranty for any replacement or repaired finished markerboard will extend for the remainder of the original warranty period only. The above notwithstanding, this warranty will not apply: (i) if the board has been subjected to harsh or improper handling, misuse, abuse, vandalism, accident or want of care; (ii) if the board has not been maintained in accordance with the maintenance information as provided by A-I Visual Systems; (iii) if repairs or alterations have been made or attempted by a person other than an authorized A-I Visual Systems representative; (iv) to the extent that any damage is caused by any breakage, chipping, cracking or damage to a markerboard after its delivery, however caused; or (v) if the board has not been pre-approved for use by A-I Visual Systems based on material location and application prior to installation. Additionally, A-I Visual Systems must receive written notification within three (3) days of receipt of the finished markerboard and prior to installation with regard to any defects that exist at the time of receipt.

A-I Visual Systems' Magnetic Markerboard products are intended for dry interior installations only; exterior and/or wet-side installations are not covered by this warranty.

A-I Visual Systems shall not be liable for and expressly disclaims any liability for damage to the contents of any structure or for consequential or other damages such as injury to persons, including damages resultant from installation of its product. A-I Visual Systems does not warrant the installation of any materials, and is not responsible for any damage to its product, or any persons or products, due to installation. Some states do not allow the exclusion or limitation of consequential damages, so the above limitations or exclusions may not apply to you.

INSTALLATION INSTRUCTION

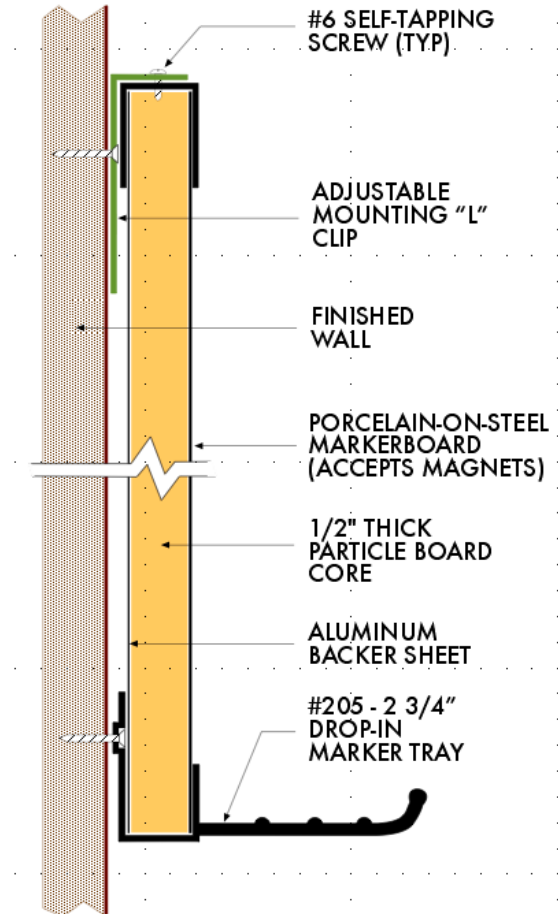
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SERIES 100 MARKERBOARDS CHALKBOARDS

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- 1) Determine the mounting height (bottom of the tray from floor). Snap a level chalk line on the wall at the desired height.
- 2) Align the top of the tray with the chalk line and attach the tray to the wall with wall fasteners appropriate for the wall type.
- 3) Attach the top mounting "L" clips so the top of the clips are 48 $\frac{1}{4}$ " (or board height plus 0.25") above the portion of the tray where the board rests. The slotted side of the clips should be against the wall. **DO NOT TIGHTEN COMPLETELY...**
- 4) Apply adhesive (if required per specifications) to the back of the board by using golf ball sized daubs of adhesive approximately 12" apart. Adhesive should be no closer than 6" to the edge of the board. Caution should be exercised not to use adhesive too sparingly or to allow adhesive to remain on back of board for more than 10 minutes prior to mounting the board on the wall.
- 5) Install the board by placing the bottom into the slot in the tray. Push the board firmly down and against the wall while aligning the ends of the board to the tray.
- 6) Using a rubber hammer, tap the top mounting "L" clips down tight against the top of the board frame.
- 7) Screw "L" clips to board using #6 self-tapping screws provided.

IMPORTANT NOTE: These boards are very heavy and must be properly handled and installed. If you cannot locate studs, other mechanical parts such as toggle bolts or metal anchors will have to be used. Solid masonry wall will require special masonry drill bits and metal plugs.



SERIES "100"

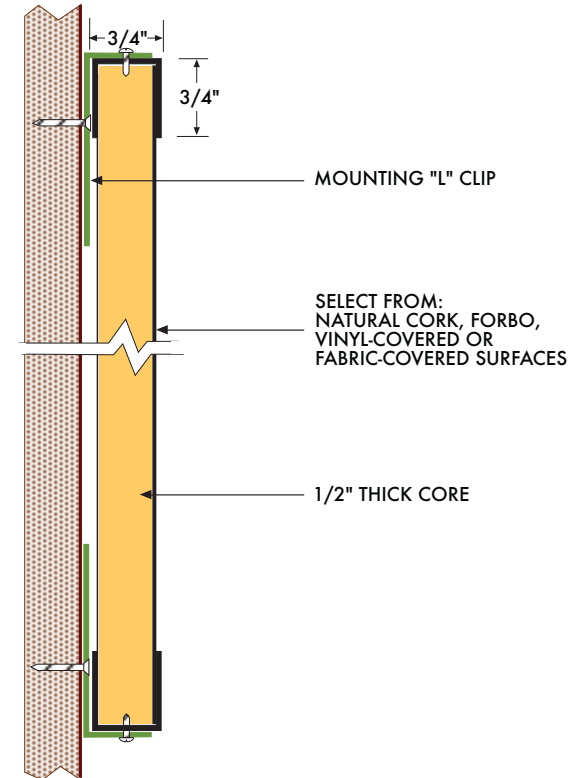
INSTALLATION INSTRUCTION

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SERIES 100 TACKBOARDS

- 1) Determine the mounting height (bottom of the tray from floor). Snap a level chalk line on the wall at the desired height.
- 2) Attach the bottom mounting "L" clips to the wall (with bottom of clips aligned with chalk line) using wall fasteners appropriate for the wall type.
- 3) Attach the top mounting "L" clips so the top of the clips are 48 1/4" (or board height plus 0.25") above the portion of the tray where the board rests. The slotted side of the clips should be against the wall.
DO NOT TIGHTEN COMPLETELY...
- 4) Apply adhesive (if required per specifications) to the back of the board by using golf ball sized daubs of adhesive approximately 12" apart. Adhesive should be no closer than 6" to the edge of the board. Caution should be exercised not to use adhesive too sparingly or to allow adhesive to remain on back of board for more than 10 minutes prior to mounting the board on the wall.
- 5) Install the board by placing the board on top of bottom "L" clips. Screw "L" clips to board using #6 self-tapping screws provided.
- 6) Using a rubber hammer, tap the top mounting "L" clips down tight against the top of the board frame.
- 7) Screw "L" clips to board using #6 self-tapping screws provided.

IMPORTANT NOTE: These boards are very heavy and must be properly handled and installed. If you cannot locate studs, other mechanical parts such as toggle bolts or metal anchors will have to be used. Solid masonry wall will require special masonry drill bits and metal plugs.



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BURLAP WEAVE VINYL



SPECIFICATION

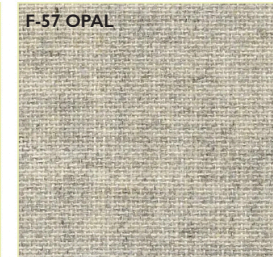
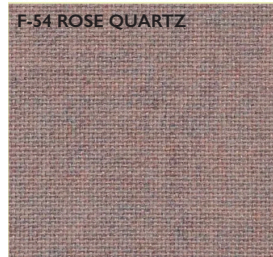
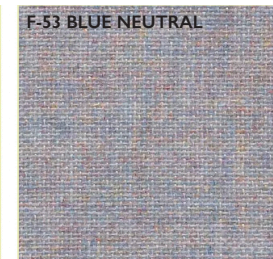
Style	Harborweave	Performance	
Fabric	Osnaburg	Tensile (Minimum)	50 x 55 lbf
Weight	21.0 oz. ply	Tear (Minimum)	25 x 25
Width	53/54 inch	Federal Spec.	CCC-W-408A, Type II
Repeat	None	CFFA Spec.	CFFA-W-101-D, Type II
Matching Info	Random match, reverse hang		
Cleaning		Fire Testing	
Normal cleaning should be done with mild ingredients such as soap detergent and water. If sustained and stronger cleaning is required, liquid household cleaners such as Lestoil should be used. Rinse with clean water and dry with absorbent cloth. Stains should be removed as quickly as possible as time is especially important for removing material containing colors or solvents such as ball point ink, nail polish, lipstick, paint...		NFPA 101 Life Safety Code NFPA255 (UL723, CA S102M) Tunnel test1 Type 1 Class A Rating NFPA 286 Corner Burn Test2 Meets requirements for Flame Spread,Smoke Developed and Flashover UL Labeled and Listed	
100% water-based inks/Cadmium Free			
Vinyl wall-coverings are treated with an antimicrobial to resist the growth of mildew and bacteria.			
Other fabric colors and patterns are available.			
Color and pattern may vary from monitor to monitor. Actual samples available upon request.			
Colors may vary slightly between dye lots.			

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FR701 TEXTILE FABRIC COLORS

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SPECIFICATION

Style	2100
Contents	100% Post consumer recycled polyester
Weight	16.5 oz/lineal yard
Width	66" minimum useable
repeat	None

Performance

Breaking strength	150lbs. min. warp and fill (ASTM D5034)
Tear (ASTM D2261)	30lbs. min. warp and fill
Colorfastness to light (AATCC 16 Option 3)	40 hrs. min.
Colorfastness to crocking (AATCC 8)	class 4 min. dry class 3 min. wet

Cleaning

W-S

Fabric may be cleaned with mild, water-free solvents or water-based cleaning agents or foam.

Acoustical Performance

The net change in Noise Reduction Coefficient (NRC) when an acoustical panel core is covered with FR701 ranges from NRC 0.00 to 0.05

Flammability

ASTM E-84 Class I or A

Colors may vary slightly between dye lots.

Other fabric colors and patterns are available.

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FORBO COLORS

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SPECIFICATION

Construction

Linoleum resilient homogeneous tackable surface material shall be of natural materials consisting of linseed oil, granulated cork, resin binders and dry pigments, mixed and calendared onto a natural jute backing. Uni-Color shall extend throughout thickness of material.

Contains no harmful by-products or carcinogens.

Flexibility

Will not crack or break when bent around a 2 3/4' diameter cylinder.

Fire Resistance

ASTM E-84 (Final Contribution) - Class B
NFPA 253 (Critical Radiant Flux) - Class II

Performance

Due to the natural burlap backing providing a strong durable foundation, the product is dimensionally stable in all directions when properly installed. it resists cracking, drying and peeling.

Cleaning

Bulletinboard's Linoleum surface, provides for a washable finish to retain original appearance. The surface can be wiped or washed using any common pH neutral cleaning method (pH 7-8.5). Simply rinse with water after cleaning.

Performance

Due to the natural burlap backing providing a strong durable foundation, the product is dimensionally stable in all directions when properly installed. it resists cracking, drying and peeling.

Color may vary from monitor to monitor
Actual samples available upon request.

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MARKERBOARD

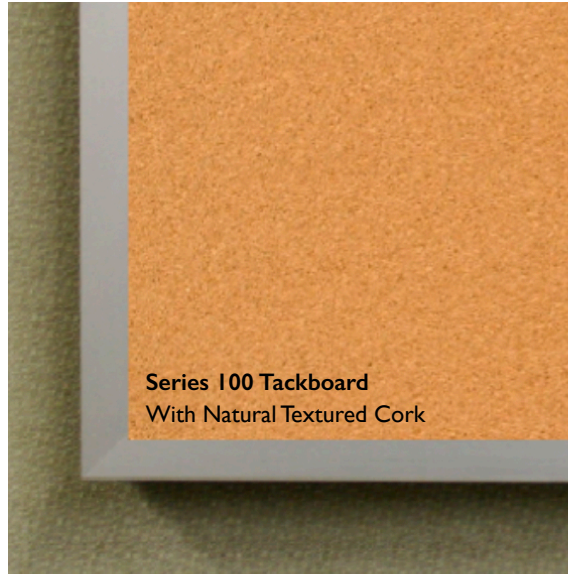
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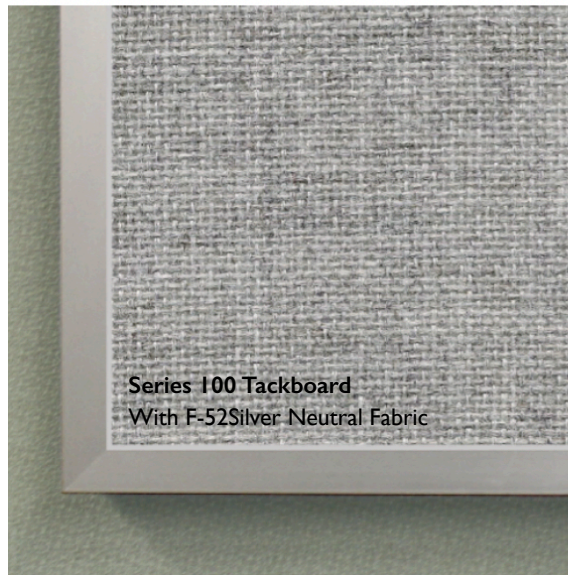
TACKBOARD



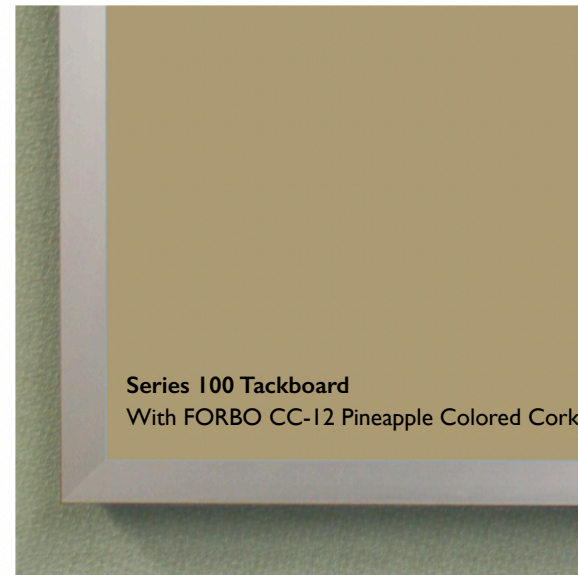
Series 100 Tackboard
With Natural Textured Cork



Series 100 Tackboard
With V-01 Feather Dawn Vinyl Fabric



Series 100 Tackboard
With F-52 Silver Neutral Fabric



Series 100 Tackboard
With FORBO CC-12 Pineapple Colored Cork