# COLUMN CLADDING Installation Guide

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# Column Cladding

### **Column Cladding with Standard Brackets**

Item	Quantity	18" Dia.	20" Dia.	Description
1 2 3 4 5 6	100	BP-02218-X217F BP-01410-WF D-03285-M60 D-03285-M72 H-11042S	P-12360	Retainer Pin Panel 102" Joint Back-up Strips Rear Extrusion 60" Rear Extrusion 72" #10 X ½" TEK Screw #10 X ½" Thread-Cutting
9 10 11 12	10 14 28 2 4	H-10951-X P-10474-MFB P-10475-MFB P-11648-MFB P-15279-X217F	H-10951-X P-10474-MFB P-10525-MFB P-11648-MFB	#12 X 1 ¼" TEK Screw #10 X ¾" Phillips Head Column "U" Bracket Bracket Extension Plate Trim Cap Stop Trim Cap 102" J-Bracket

### **Optional Kits**

Optional kits may be specified for this installation. See specific instructions in option kits before proceeding with installation. If an option kit was indicated at time of order, it may be included in this carton. Option kits may also be ordered separately.

Description / Function	Part / Kit Number
18" Diameter - 30" Extention Kit	X-33078
"U" Bracket Extension Plates (poles less than 8" or I-beam)	X-15228
"U" Bracket Extension Plates (only if ordering both X-33078 and X-15228)	X-15228A
Intercom Face Plate Kit	X-33055
Access Cover Plate	X-33049

# Suggested Tools & Materials

- (1) Rivet Gun
- (1) Tape measure 16' with 1" wide blade
- (2) High-power screwdrivers with 5/16" hex tip
- (1) Saber saw or Sawzall (for metal cutting only)
- (1) Power drill with 1/4" and 3/8" drill bits
- (1) 5/16" nut driver
- (1) #2 Phillips screwdriver
- (1) Chalk and chalk line
- (1) Carpenter square 20" minimum
- (1) Carpenter level 20" minimum

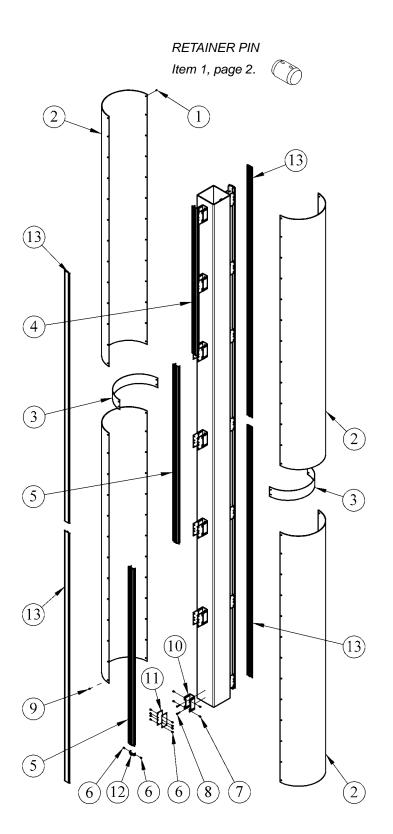
- (1) Rolling scaffolding or scissors lift
- (1) Heavy scissors or tin snips
- (1) Marking pencil or non-permanent pen
- (1) WD-40 lubricant spray
- (1) Rubber mallet
- (1) Circular saw with metal cutting blade (optional)
- (1) Suction cup for panel installation (optional)
- (2) Step ladders: 8' and 14' (optional)
- (1) Linoleum knife (optional)
- (1) Ratchet-type tie-down straps (optional)

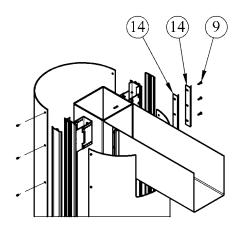
#### Figure 1. Column cladding parts assembly

Exploded view

#### **Cladding Kit Instructions and Guidelines**

IF OPTIONAL KITS ARE SPECIFIED, PLEASE SEE OPTION KIT INSTRUCTIONS BEFORE PROCEEDING WITH INSTRUCTION BELOW.





Undercanopy obstruction parts. See Step 7, instructions on obstacle trim.

## **Column Cladding Assembly**

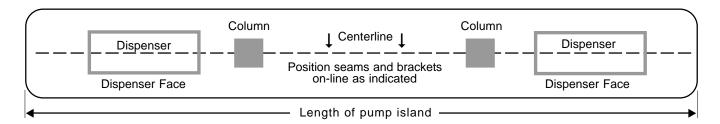
# Step 1. Determine cladding seam locations

Cladding Kit Instructions and Guidelines

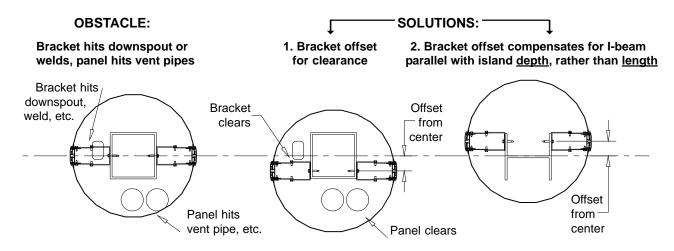
IF OPTIONAL KITS ARE SPECIFIED, PLEASE SEE OPTION KIT INSTRUCTIONS BEFORE PROCEEDING WITH INSTRUCTION BELOW.

"U" brackets must position on centerline, with pump island length.

## Figure 2. Plan view of pump island



## Figure 3. Determine standard extension bracket offset requirements



## Figure 4. Determine optional extension bracket requirements

Brackets included with column cladding accommodate square or round poles/I-beams where "U" bracket mounts to flange. See chart at right to determine if Optional "U" Bracket Extension Kit is required.

Square Pole  A	Round Pole	I-Beam Flange Web
A		otional "U" Bracket Extension Kit required ere "U" bracket attaches to web of I-beam.

# Cladding Dimension "A" Cladding Diameter Brackets Ext. Brackets 18" 8" to 12" 4" to 12" 20" 8" to 12" 4" to 14"

#### **Parts List**

Optional "U" Bracket Extension Kit\* Part Number: X-15228

\*Longer-than-standard extension plates that attach to "U" brackets.

# Step 2. Install "U" brackets to column

- Mark vertical centerlines on both sides of each column, using a chalk line.
- These lines will be used to position "U" brackets.
- If centerline falls on a welded column seam, move both chalk lines ½" off-center; equally and in the same direction on both sides, as illustrated in Figure 5 (below).
- See Figures 3 and 4 for other conditions requiring seam position adjustments.

## Figure 5. Offset seam positioning method\*

**Example:** Welded seams are difficult to drill with TEK screws, thus centerline should be offset.

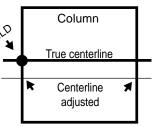
#### **OBSTACLE:**

True centerline obstructed by weld.

#### **SOLUTION:**

Move both chalk lines 1/2" equally in same direction.

\* Prevents out-of-round columns; preserves warranty and guarantee.



(Drawing not to scale.)

#### "U" brackets required

 Fourteen (14) "U" brackets per 17' column [six (7) "U" brackets per side].



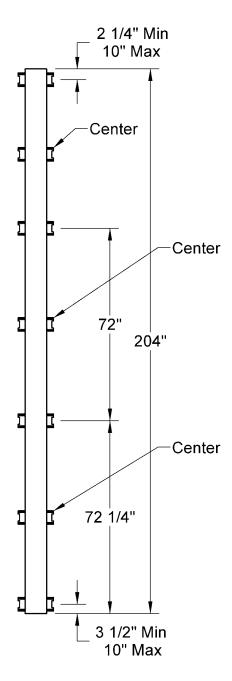
# Measure "U" bracket positions on both sides of pole (See Figure 6.)

- Follow vertical chalk lines established in Step 1.
- Set "U" bracket position measurements at chalk lines, refering to dimensions at right (Figure 6.)

#### Install "U" brackets

 Fasten all "U" brackets on-center of column chalk line using two (2) #12 x 1¼" TEK screws per bracket.

# Figure 6. "U" bracket locations





# Step 3. Install bracket extension plates to "U" brackets

Cladding Kit Instructions and Guidelines

IF OPTIONAL KITS ARE SPECIFIED, PLEASE SEE OPTION KIT INSTRUCTIONS BEFORE PROCEEDING WITH INSTRUCTION BELOW.

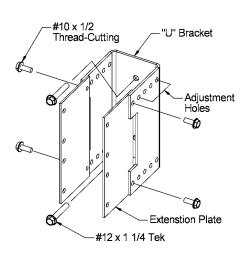
### **Extension plates required**

 Twenty-four (28) extension plates required [two (2) plates per "U" bracket].

# Figure 7. Standard "U" bracket / extension plate assembly

#### **Fastening extension plates**

 Use four (4) #10 x ½" thread-cutting screws [two (2) thread-cutting screws per plate], as shown in Figure 7.

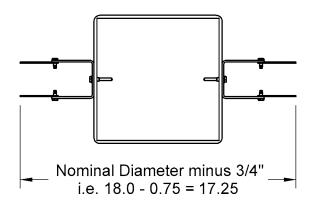


### Measure edge-to-edge span of:

Pole (or I-beam) <u>plus</u> installed left and right "U" brackets with extension plates

Overall distance should be ¾" less than diameter of column cladding;
 i.e. 17 ¼" for 18" column cladding diameter. (See Figure 8.)

Figure 8. Relationship of "U" bracket assembly to final installation



# Step 4. Mount rear cladding extrusion to "U" bracket extension plates

#### Start installation at grade level. (See Figure 9C.)

#### Rear extrusions required

- Two (2) 60" lengths top sections;
- Four (4) 72" lengths mid & grade level sections [one (1) at 60" and two (2) at 72", per side].

#### Trim cap stop

• Two (2) trim cap stop brackets [one (1) per side].

#### Install trim cap stop

 Prior to installing rear extrusions to column, install one trim cap stop bracket to bottom end of two (2) 72" rear extrusions (one per side), as shown in Figures 9A. (exploded) and B. (assembled).

# Before fastening rear extrusion... verify fit & alignment

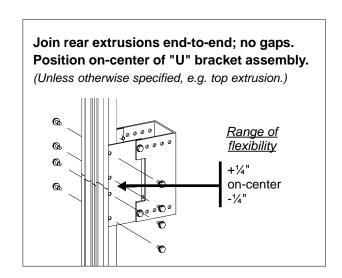
 Prior to driving screws, push extrusion tightly against "U" bracket extension plate assembly to ensure tight fit.

#### Position rear extrusion for installation

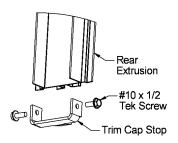
- First, install one (1) 72" rear extrusion with attached trim cap stop, to both sides of pole / beam, as shown in Figure 9C.
   Trim cap stop should set on grade.
- Repeat installation procedure for middle 72" and upper 60" rear extrusion lengths as diagrammed in Figure 9C.

#### Fastening method for rear extrusions

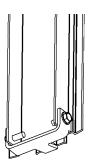
- Fasten rear extrusions to "U" bracket assemblies with #10 x ½" TEK screws; [four (4) screws per extension plate].
- Do not over-tighten screws.
- Remove and replace any stripped screws.



## Figure 9A. Install trim cap stop



# Figure 9B. Assembled trim cap stop





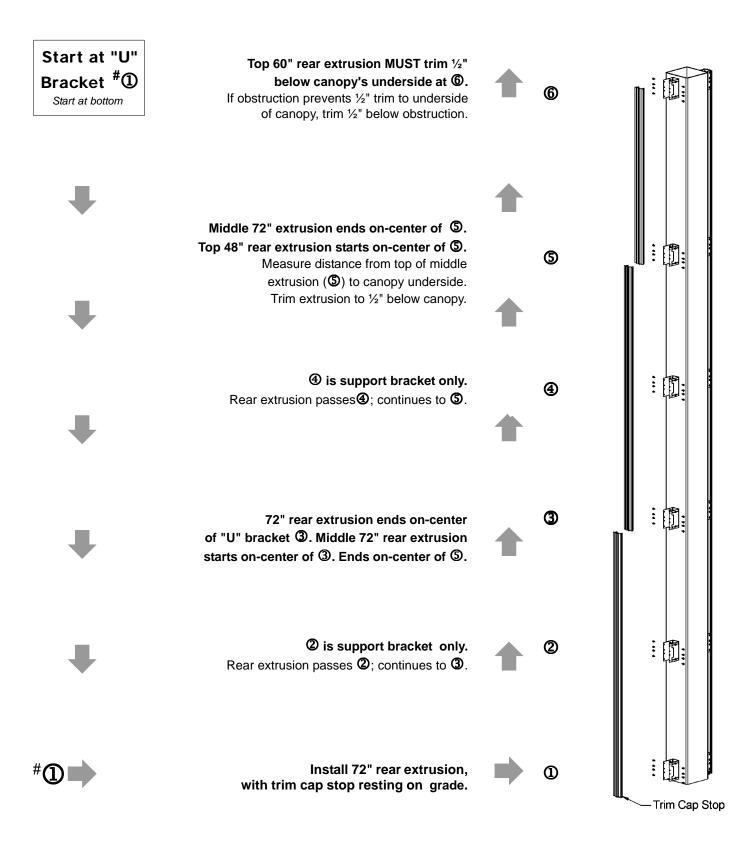
# Figure 9C.

# Rear cladding extrusion attachment to "U" bracket assemblies

(One side shown)

#### Cladding Kit Instructions and Guidelines

IF OPTIONAL KITS ARE SPECIFIED, PLEASE SEE OPTION KIT INSTRUCTIONS BEFORE PROCEEDING WITH INSTRUCTION BELOW.



# Step 5. Position for installation; lower panels to rear extrusions



# PLEASE DO NOT REMOVE PROTECTIVE STATIC WRAP FROM PANELS UNTIL END OF STEP 8.

**NOTE:** Static wrap <u>temporarily</u> protects finish during installation process.

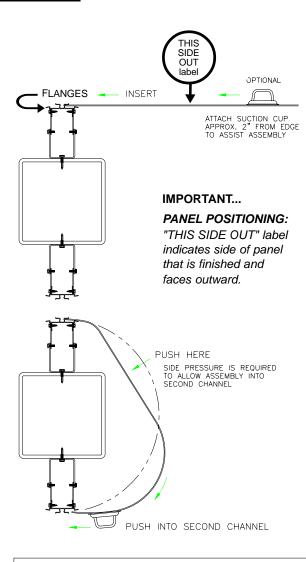
#### Panels required for installation

- Four (4) panels at 102" high [two (2) lower panels and two (2) upper panels per column].
- Two (2) #10 x ¾" Phillips head screws per lower panel.
- Twenty-four (26) retainer pins are required for each lower panel.

#### Position grade-level cladding panels

- Lower panels must install ¼" minimum above grade and/or obstacles.
- Install lower panels first. Insert one pin in pre-drilled openings #2 through #12 along one edge of panel.
- Starting at trim cap stop, insert lower corner of one (1) panel into rear extrusion flange. (See Figure 10.)
- Continue easing side of panel into flange, starting from grade toward top of panel, until one side of panel is fully inserted. (See Figure 10.)
- Starting at the bottom corner, flex the panel around into the extrusion on opposite side.
- Apply gentle pressure to already-installed side of panel (see Figure 10; "PUSH HERE") to insure panel is evenly secured into flange groove.
- When pressure is removed, panel will assume a round condition.
- To stabilize dry-fit, insert one pin in predrilled openings #2 through #12. (See Figure 11.)
- Repeat process on opposite side.
- Check and adjust panels to level across top.

### Figure 10. Positioning panels for installation



#### Panel positioning tips:

- Installer assistance may be useful on first panel insert attempt.
- Ratchet straps may help maintain cylinder shape while fitting panel edge into flange.
- Suction cups may be helpful during cold or wet weather.



# Step 6. Install joint back-up strips; finalize bottom column installation

Cladding Kit Instructions and Guidelines

IF OPTIONAL KITS ARE SPECIFIED, PLEASE SEE OPTION KIT INSTRUCTIONS BEFORE PROCEEDING WITH INSTRUCTION BELOW.

# Joint back-up strips mount <u>behind / between</u> lower panels and upper panels to:

 Stabilize upper panel and lower panel seam connection, ensure tight seam fit, and allow for expansion.

#### Joint back up strips provided

 Two (2) joint back-up strips with pre-drilled holes to pin back-up strip <u>and</u> panel together into rear extrusion. (See Figure 12.)

Figure 11. Factory pre-drilled pin

Do not over-tighten screws.Confirm any alignment corrections.

Position joint back-up strip as detailed in

Install #10 x 3/4 Phillips-head screws in lower

Joint back-up strips connect

Repeat for opposite side.

Final installation of lower panels

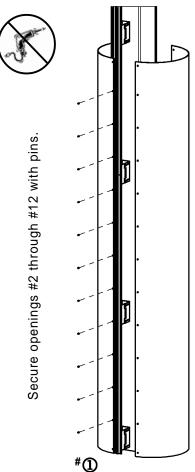
Figure 12, then insert pin #13.

panel #1 opening.

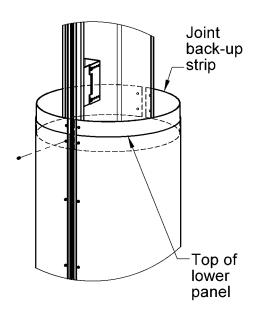
Factory pre-drilled pin openings; dry-fit pinning

openings; dry-fit pinning behind lower and upper panels

Figure 12.



RE: Step 5, LOWER PANELS:
Openings #2-#13: Fill with pins (no screws or rivets).
Opening #1: Fill with #10x¾" Phillips head screw.



Both pre-drilled openings (panel & back-up strip) align together and pin into rear extrusion.

NOTE: Bow back-up strip until pre-drilled holes align.

# Step 7. Position / install upper column; critical trim specifications

### Upper column installation is similar to lower column process

#### **IMPORTANT** differences include:

- Trimming for final height and / or obstructions.
- Beginning the fastening process at top of joint back-up strip / bottom of upper panel.

#### Upper column may require straight trim:

- Measure distance from top of installed lower panels (excluding back-up strip) to underside of canopy deck. Straight trim if necessary.
- Maximum cut length of top panel will be less than actual measured distance.

#### CRITICAL:

#### TRIM SPECIFICATIONS GUIDELINES

Trim distance between top of upper column panel and canopy underside, and column-top obstacles.

If current temperature is (choose one) at time of installation:



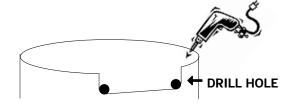
• < 0° F	. leave 1" space
• > 0° F to 40° F	. leave 3/4" space
• > 40°F to 80°F	. leave 1/2" space
• > 80° F	. leave 1/4" space

This space permits expansion / contraction with temperature changes. Also see "Radius Cutting Guidelines" below for special trim instructions regarding obstacles.

#### CRITICAL: RADIUS CUTTING GUIDELINES FOR OBSTACLES

All cut outs for obstacles must have radius corner to eliminate risk of panel fractures.

- minimum suggested radius 1/4" or 6mm
- largest possible radius preferred





# Position / install upper column; without obstacles

Cladding Kit Instructions and Guidelines

IF OPTIONAL KITS ARE SPECIFIED, PLEASE SEE OPTION KIT INSTRUCTIONS BEFORE PROCEEDING WITH INSTRUCTION BELOW.

#### Top panels and back-up strips

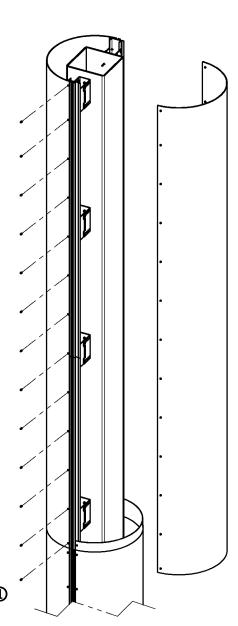
- -- with or without obstacles
- Two (2) 102" panels [one (1) panel per side].
- · Pins for top panels, as required.

Figure 13.

Back-up strips pin behind middle panels and top panels

#### Position and install top panels

- -- without obstructions
- Follow Step 5, Figure 10 for general "bottomup" installation sequence.
- Secure top panel's #1 pre-drilled hole with back-up strip's upper pre-drilled hole into rear extrusion with pin. (See Figure 13.)
- Dry-fit upward, seating panel into rear extrusion flange, until one side is fully inserted.
- Temporarily add one (1) pin to upper-most hole until both sides of panel are dry-fitted.
- Check alignments and repeat on other side.
- Insert pins in all remaining pre-drilled holes.





#### If top of upper panel required trimming ...

- DO NOT drill additional retainer pin holes.
- Use uppermost <u>existing</u> factory-pre-drilled hole, secured with retainer pin.



#### General "DO NOTs" for upper column ...

 DO NOT use TEK screws or rivets to secure any area of top panels.



#### Critical under-canopy trim airspace ...

• DO NOT caulk top of panel / column to under-canopy.

# Step 8B. Position / install upper column; with obstacles

(continued)

#### Install top panels -- with obstacles

# J-brackets stabilize vertical panel cuts surrounding obstacle

- Four (4) J-brackets
- Six (6) <sup>3</sup>/<sub>4</sub>" Philips-head screws [three (3) screws per J-bracket pair].

#### Attach J-brackets to obstacle

- Establish J-bracket mount locations by marking intersection of back-up strip and gutter/ obstacle.
- Trim J-bracket pairs to same height as gutter/obstacle. (See Figure 14.)

### Trim panel for obstacle

 Follow all panel measurement and cutting guidelines detailed on page 11 before installing top panels.

#### Install top panels with obstacles

- Secure top panel's #1 pre-drilled hole with back-up strip's upper pre-drilled hole into rear extrusion with pin. (See Figure 13.)
- Dry-fit upward, seating panel into rear extrusion flange, until one side is fully inserted.
  - IMPORTANT: Carefully work panel cut out in between pair of J-brackets positioned on either side of obstacle.
- Temporarily add one (1) pin to upper-most opening until both sides of panel are dryfitted.
- Check alignments and repeat on other side.
- · Insert pins in all remaining pre-drilled holes.

Figure 14. Install J-bracket to obstacle

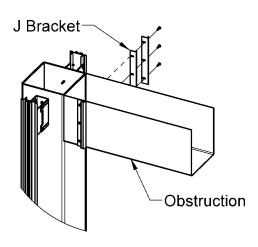
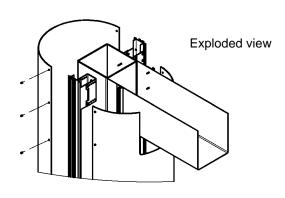
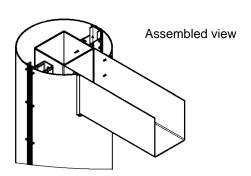


Figure 15. Install top panels with obstacles





Panels are now installed and secured to rear extrusion. Remove temporary protective static wrap from columns. Clean and rinse columns if necessary. (See approved cleanser, page 14.)

# Step 9. Install seam trim caps

Cladding Kit Instructions and Guidelines

IF OPTIONAL KITS ARE SPECIFIED, PLEASE SEE OPTION KIT INSTRUCTIONS BEFORE PROCEEDING WITH INSTRUCTION BELOW.



Optional column attachments may be specified for this installation. Please see specific instructions in option kits before proceeding with this step.

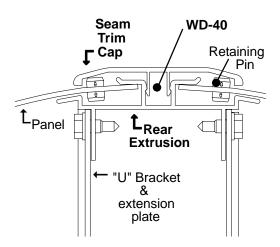
#### Required for seam trim cap installation

 Four (4) lengths of seam trim cap extrusion [two (2) per side].

#### Installation of seam trim cap

- · Remove film before proceeding with trim installation.
- Lightly spray WD-40 into channel of rear extrusion.
   Wipe excess. (See Figure 16.)
- Starting at grade, align trim cap with panel seams.
- Working upward, insert trim cap into rear extrusion channel as diagrammed, using a rubber mallet or similar protected hammer.
- Horizontal end-to-end seams between trim caps should align with horizontal seam between upper and lower panels.
- Cut top of trim cap ¼" below canopy deck panel and/or column-top obstacles.
- Repeat process for opposite side.

#### Figure 16. Seam trim cap assembly



## Maintenance Guidelines Cleansers, polishers & fluids

### Thermoplastic Resin Panels

#### **IMPORTANT:**

#### Periodic thorough cleaning recommended

- Use a soft cloth or sponge when applying any of the approved products to the right.
- Always test solution in a small, inconspicuous area before actual application.

#### Graffiti removal:

Most permanent markers, crayons, paint, and burn marks can be removed with a non-petroleum <u>citrus-based</u> solvent (such as Citra-Solv) at full strength. After cleaning, buff area with an approved polish to restore gloss.

## Approved:\*

Soap and Water Ammonia No abrasives Armor-All Protectant

\* IMPORTANT:

For each panel, always test solution on a small, inconspicuous area before using.

# Notes:





8:30am-5:00pm EST, M-F

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Foreign patents: EP 1 021 628; 4,124,960.
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