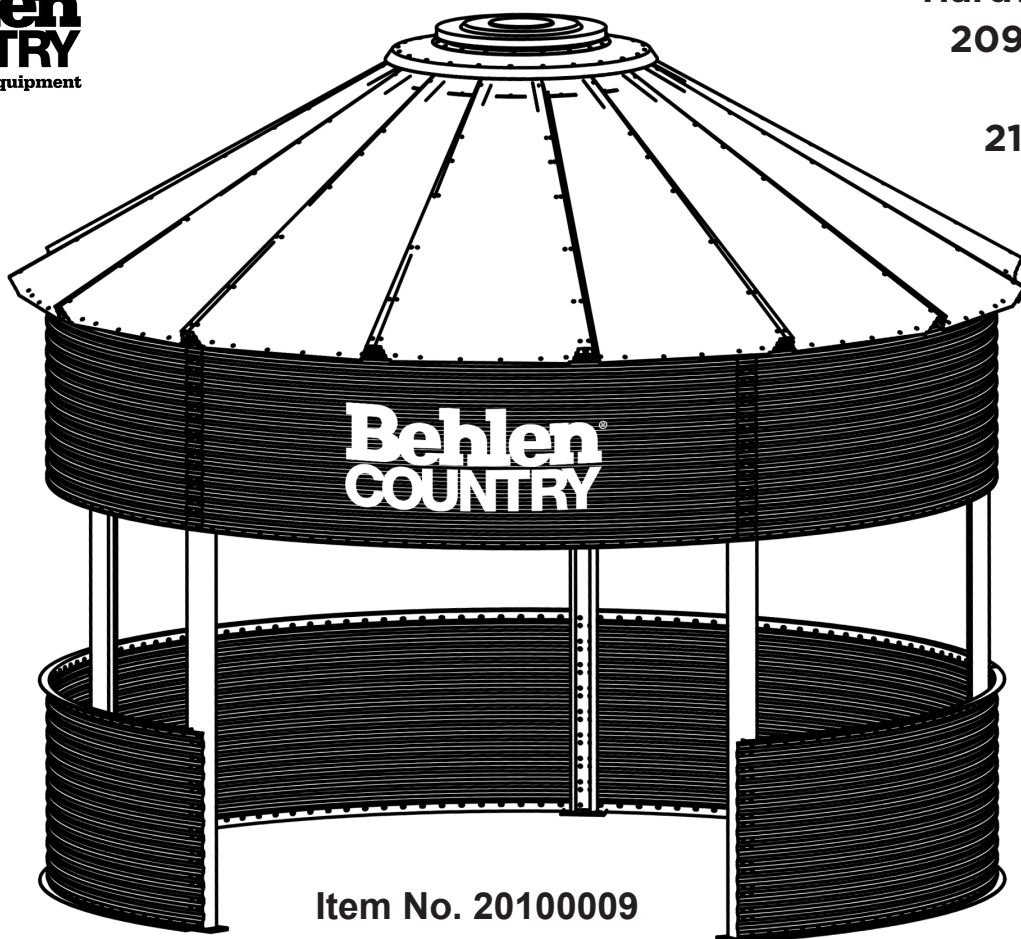


Behlen
COUNTRY
Farm & Ranch Equipment

Hardware Kit
20902500
&
219639



BinVista™ Gazebo

Installation Guide & Owners Manual

Congratulations on your new BinVista™ Gazebo!

A new twist on an old classic, the easy-to-install **BinVista™ Gazebo** is the perfect addition to any outdoor space. For over 85 years, Behlen has been committed to delivering top-notch products that stand the test of time. Our new BinVista™ continues this tradition of excellence with its durable construction and rustic charm.

This step-by-step installation guide will walk you through the set-up and maintenance of your new BinVista™ so you can start enjoying your new outdoor space in no time.

Have questions or need assistance?

Our dedicated Customer Service Team is always happy to help!

Customer Service Center:
Ph: 800-447-0569
www.behlencountry.com

PO Box 569
Columbus, NE
68602-0569

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Tools & Setup Recommendations:

- (4) People (minimum)
- 10" Crescent Wrench
- Impact Wrench
- 9/16" Box End Wrench (2)
- 9/16" Deep Socket (2)
- 6" Long 3/8" Ratchet Extension
- 1/2" x 6" Alignment Pin (2)
- Bolt Cutters
- 8' Ladder (2)
- Tape Measure
- Impact Gun (2)
- Hammer Drill
- Hammer
- 1/2" Concrete Drill Bit
- Tool Belt to hold nuts and bolts
- Telehandler
- Lifting Equipment

The **BinVista™ Gazebo** comes with a one-year limited warranty.
For details, head to www.behlencountry.com/warranty



Planning for the Receipt and Installation of Your BinVista™ Gazebo from Behlen Country

Inspection of Materials Upon Receipt:

- Upon arrival of the MATERIALS at the delivery site, the BUYER must inspect the MATERIALS for damage and count, and properly store the MATERIALS prior to erection.
- If any damage to the MATERIALS or loss of the MATERIALS is noted, the BUYER shall immediately notify Behlen Mfg. Co. in written form, and the BUYER must file a claim.
- Behlen Mfg. Co. shall not be responsible for damage or loss to the MATERIALS incurred after arrival at the delivery site.

Shortage Claims:

- In the event of shortage claims, the BUYER must notify Behlen Mfg. Co. within 10 days of arrival of the MATERIALS at the delivery site. The BUYER must make accurate reference to part number, description and quantity of the items claimed short.
- Upon approval of the BUYER'S shortage claim, Behlen Mfg. Co. shall expedite the manufacture and supply of the parts and ship in the most economical, practical, and expeditious manner possible.

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Introduction:

- The purpose of this manual is to explain the setup, installation, and maintenance of the BinVista™ Gazebo. It also contains parts lists for reference and ordering replacement parts as needed.
- It is recommended that you **read this manual in its entirety** prior to starting construction to ensure the proper installation, care, and maintenance of the BinVista™ Gazebo. The equipment is built to provide many years of dependable enjoyment when properly installed and used.
- If you have any further questions, comments, improvements, or suggestions regarding the contents of any of the information provided, please see the contact information on the front page.

Limited Rights Data:

This publication has been developed and is required for use during setup and assembly. It is provided with the intention that it **ONLY** be used for official company use, for administrative, or for setup, installation and maintenance purposes. This manual is being provided with limited rights and shall not be reproduced, without the prior written permission of Behlen Mfg. Co. (“Behlen”). Additionally, the contents of this manual may not be used outside of Behlen in whole or in part for manufacture or competitive procurement. This legend shall be included on any reproductions in whole or in part. Limited rights are not subject to an expiration date.

WARNING:

Coated steel panels are subject to corrosion and discoloration if moisture becomes entrapped between the sheets.

Panels should be inspected for entrapped moisture upon arrival at the job site and properly protected and stored in order to prevent the accumulation of moisture between panels. In addition to moisture due to rainfall, moisture can also form between panels due to condensation. When panels are not expected to be immediately installed, storing them inside is recommended. It is also recommended that panels never be covered with plastic as ground moisture can collect under the plastic and lead to entrapped moisture.

Behlen will not accept responsibility for corrosion or other damage occurring to panels while stored in the job site.

Safety Considerations:

At Behlen Country, safety is always our top priority— from handling and assembly to operation. We believe safe working conditions, methods, and products should be the top priority for all contractors, installers, and manufacturers. While the Department of Labor's Occupational Safety and Health Administration (OSHA) has established federal safety standards, it's the responsibility of contractors and employers to familiarize themselves with these requirements and implement them. Additionally, all relevant state and local codes should be adhered to, ensuring a comprehensive approach to safety.

Safety Definitions:



Keep an eye out for this symbol, which highlights crucial safety information. It means **Attention— be alert! Your safety is involved.**



Caution: Before assembling your BinVista™ Gazebo, check your local weather forecast for high winds.



Caution: When lifting the top section, use OSHA-approved lifting equipment.



Important: For best results, we recommend you read this manual **in its entirety** and familiarize yourself with the parts and associated part numbers before you begin. This guide provides essential information for the proper assembly of your BinVista™ Gazebo.



Important: Improper site preparation, assembly, and maintenance of the BinVista™ Gazebo may invalidate the warranty or cause unnecessary costs or mistakes.



NOTE: Behlen is not responsible or liable for:

- Unstable soil conditions or foundation issues that lead to structural damage or failure.
- Any soil analysis or foundation design.
- Any damage or failure that may occur due to incorrect assembly of the structure.
- Substitution of components not specified in this installation manual that lead to damage or failure.
- Normal wear or discoloration of components while exposed to the atmosphere.
- Damage caused by leaning sidewalls.
- Any modification of the design or structure.
- Any bodily injury that occurs during the assembly of the structure or because of modification to the design or improper construction.
- Caustic or corrosive environments that lead to structure deterioration, damage, or failure.

General Assembly Notes

- The BinVista™ Gazebo needs to be level during all assembly operations to ensure proper alignment of components.
- If it's necessary to leave the construction site for any length of time before the BinVista™ Gazebo is completed and anchored to the concrete, the BinVista™ Gazebo needs to be tied or anchored down.
- Bolts need to be torqued to ANSI/manufacturer's recommended torque requirements.
- Anchor bolt holes need to be drilled to the manufacturer's recommended hole size.
- Anchor bolt holes need to be cleaned out for proper performance.
- Anchor bolt hole depth needs to be a minimum of 3½" and a minimum 1½" from the bottom of the concrete.

BOLT DESCRIPTION	TORQUE	
	MIN.	MAX.
1/4" - 20 GR 5	70 in-lb	100 in-lb
3/8" x 16 GR 5	20 ft-lb	30 ft-lb
1/2" ANCHOR BOLT	25 ft-lb	40 ft-lb

Site Preparation

Before selecting a site for your BinVista™ Gazebo, take these items into consideration:



Choose a site for your BinVista™ Gazebo that's easily accessible for unloading and assembly equipment.



Avoid areas with low-hanging power lines.



Call and check for any underground utilities before digging. Call 811 to get your underground utility lines marked for free.

Concrete Requirements:

The foundation, footing, and groundwork specifications in this manual are provided for reference only. Due to varying state and local building codes, we strongly recommend consulting a local engineer or contractor for a foundation design tailored to your area. Behlen cannot be held responsible for any issues arising from the use of these general specifications.

The concrete contractor is responsible for assessing local soil conditions to ensure they meet the required bearing capacity and stability for the foundation.

The concrete details are designed for a 28-day minimum compressive strength of 4,000 lbs. per sq. in. for the slab and 4,000 lbs. per sq. in. for columns and footings. Concrete specifications are provided for both 2,000 and 3,500 lbs. per sq. ft. soil bearing capacity. If these values are unattainable, modifications of the concrete requirements will be necessary to compensate for existing conditions.

Footings need to be at a depth below your local frost line. Check with your state and local codes for footing depth.

Ensure all foundations and footings are poured level. Uneven surfaces can lead to gaps or unbalanced loads on the wall panels and support columns, potentially compromising the structure's integrity.

The slab must be poured flat or slightly tapered to the outside to prevent moisture from collecting on the slab.

Concrete columns should be 16" dia. x 36" deep **minimum**. State or local codes may require footings under concrete columns.

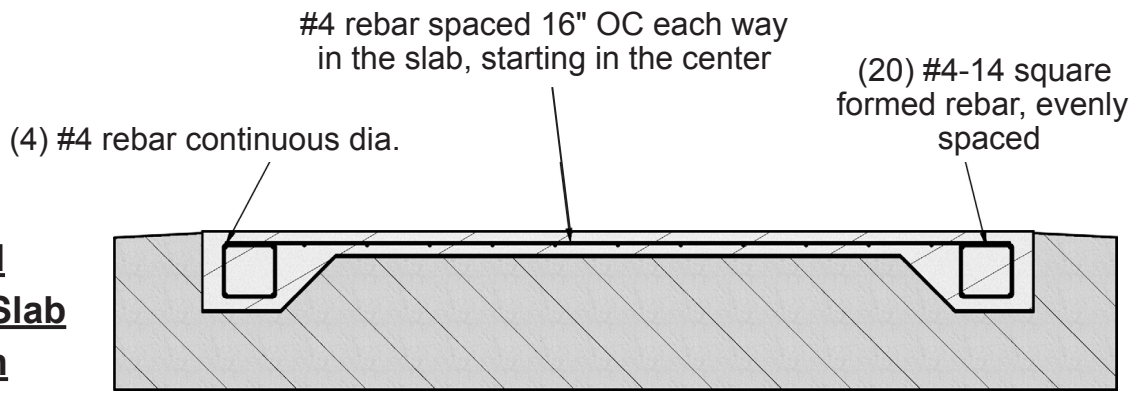
Concrete Reinforcing Requirements:

- Rebar splice length must be 16" minimum.
- Stagger splices with no more than half the rebar splice at the same point.
- Reinforcing (rebar) steel must be equal to ASTM A615 GR 40 KSI.
- The concrete slab should be a minimum of 5" thick (6" recommended), with a thickened outer edge of 20" x 20".
- The grade should be sloped away from the foundation or columns.
- Slab rebar must be spaced 16" on centers.

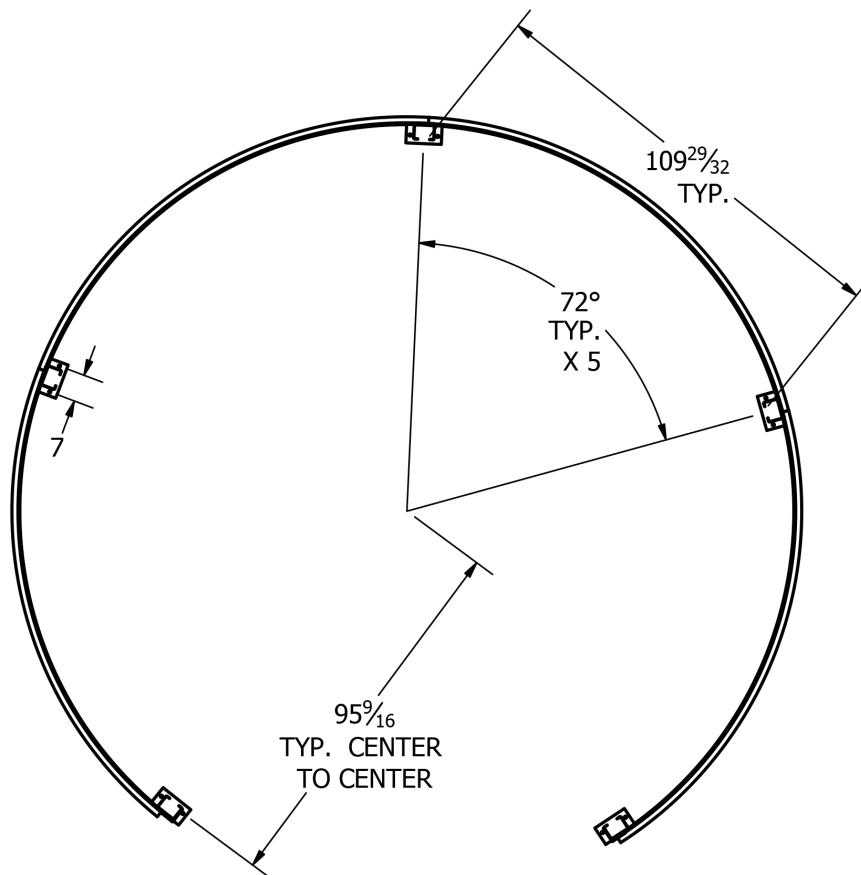
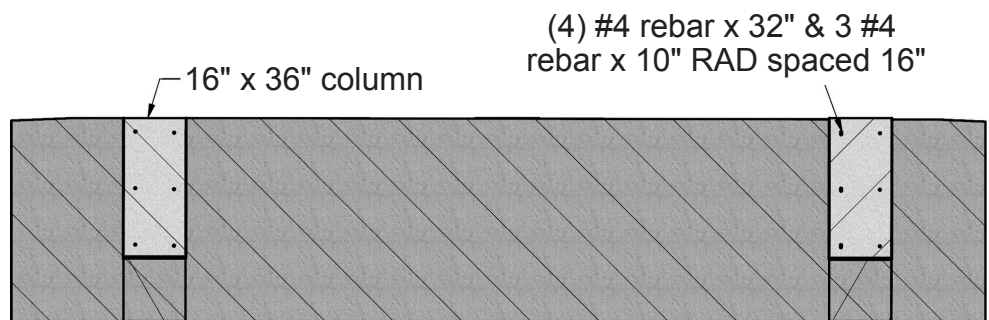
Estimated Total Concrete (CUBIC YARDS)

Concrete Slab	Concrete Columns
6.25	1

**Poured
Concrete Slab
Section**



**Concrete
Columns
Section**



Installation Instructions using Lift Equipment:

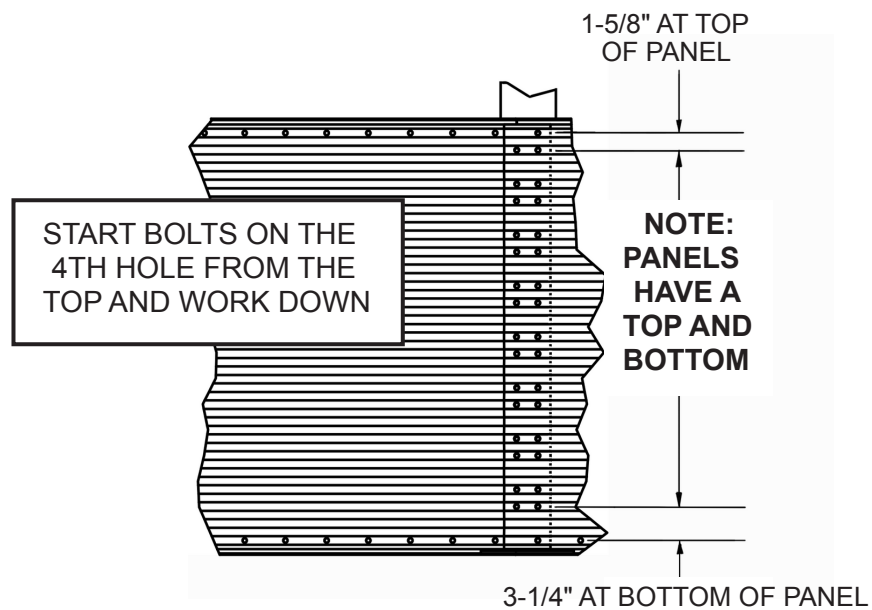
1

Make sure the top edge of the wall panel (217948) is right side up. **NOTE:** Panels have a top and bottom side. The top panel hole spacing is 1-5/8" center-to-center. The bottom has a hole spacing of 3-1/4" center-to-center. See Detail 1-A.

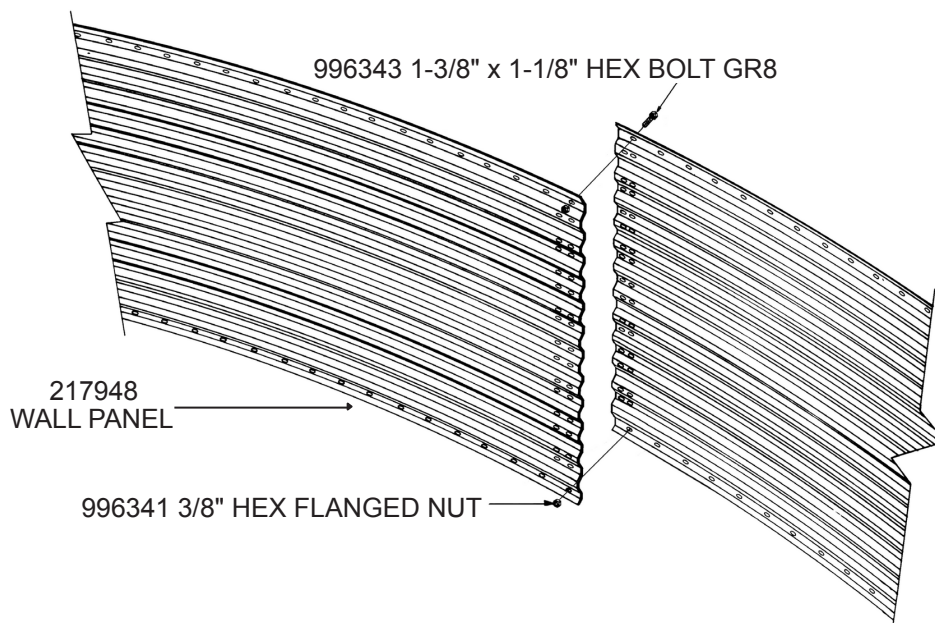
Assemble the panels in a counter-clockwise direction, overlapping panels as shown. **See Detail 1-B.** The panel with the logo (215631) will be the last panel assembled in the top ring. Only place bolts (996343) on the raised rib on the outside of the panels. Crosscheck the top ring for equal measurements. Only finger-tighten the bolts at this time. The bolts will be tightened later in the assembly.

OUTSIDE VIEW OF WALL PANELS

DETAIL 1-A



DETAIL 1-B



Installation Instructions using Lift Equipment:

2

Start bolting the Eave Angle (217758) to the top of the top Wall Panel Ring, leaving the outside hole without a bolt using 996343 (3/8" x 1-1/8" Hex Bolts GR8) and 996341 (3/8" Hex Flanged Nuts).

3

Place the first Eave Angle centered on the Wall Panel panel with the logo. Bolt the Eave Angle on the outside of the panel. Install a Fender Washer (3948020) over the slotted end holes on the Eave Angles where they meet. **See Detail 2.**

4

Attach Bird Stops (217770) at each Eave Angle splice using 996343 (3/8" x 1-1/8" Hex Bolts GR8) and 996341 (3/8" Hex Flanged Nuts). **See Detail 2.**

5

Place the Lower Platform Ring (217916) onto support equipment to achieve the recommended distance from the ground (84"). **See Detail 3.**



NOTE: Equipment used to support the Lower Platform Ring should be adjustable vertically and prevent any rotation of the Lower Platform Ring. The vertical adjustment may be required for proper fit of all roof panels.



CAUTION: Improper design and use of a support may result in damage to the roof and personal injury.



NOTE: Lower Platform Ring Support Column is not included in the kit.

6

Apply (3209010) 1/4" x 1/4" Sealer to the bottom flange outer edge of the Lower Platform Ring all the way around. **See Detail 3.**

7

Apply (3209191) 3/4" x 4" Foam Rubber Sealer to the bottom of the web. Use spray adhesive to attach the Foam Rubber Sealer to the web all the way around the Lower Platform Ring.

8

Check that the Lower Platform Ring and Eave Angles are level before installing the Roof Panels.

9

Start installing three Roof Panels (217910) approximately 120° apart. Start by bolting (Bolt 996343, Nut 996341) the top of the Roof Panel to the Lower Platform Ring leaving the last two holes on the right side without bolts.

Installing the three Roof Panels will help keep the Lower Platform Ring in place while the rest of the Roof Panels are being installed.

Installation Instructions using Lift Equipment:

10

Continue installing the rest of the Roof Panels in a clockwise direction. The Roof Panels have one edge designed to lay over the top of the first panel. **See Detail 4-A.**

11

When you come to one of the three panels previously installed, you will need to lift the edge of the panel to put the panel under the lip.

12

Continue installing the Roof Panels until all 15 panels are in place.

13

Install the Platform Panels to the Lower Platform Ring. Apply (3209010) 1/4" x 1/4" Sealer in between the panels.

14

Install the Top Roof Ring to the Platform Panels. **See Details 4-A & 4-B**

15

Install the Top Roof Ring assembly to the Top Platform Panels. **See Detail 5-A.**

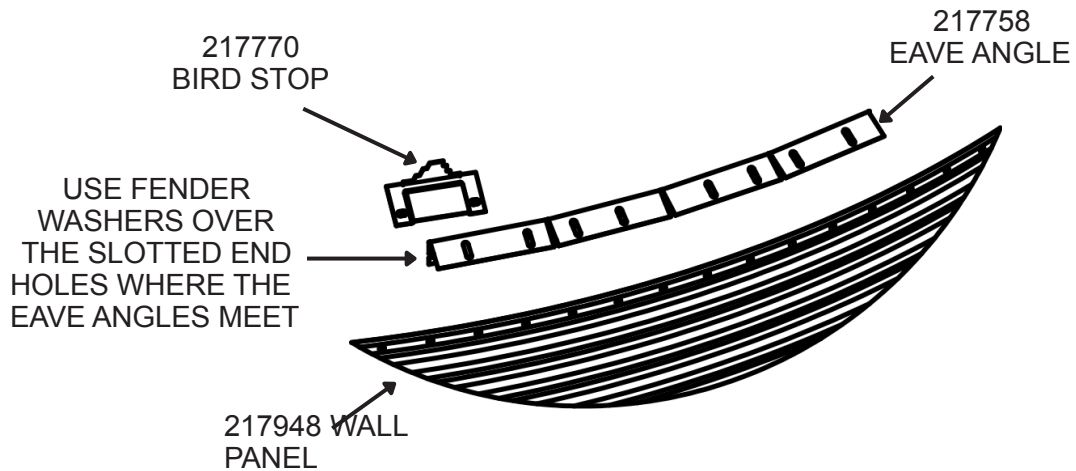


NOTE: Once you are at this point, tighten all the bolts to the manufacturer's specs before lifting the top section.

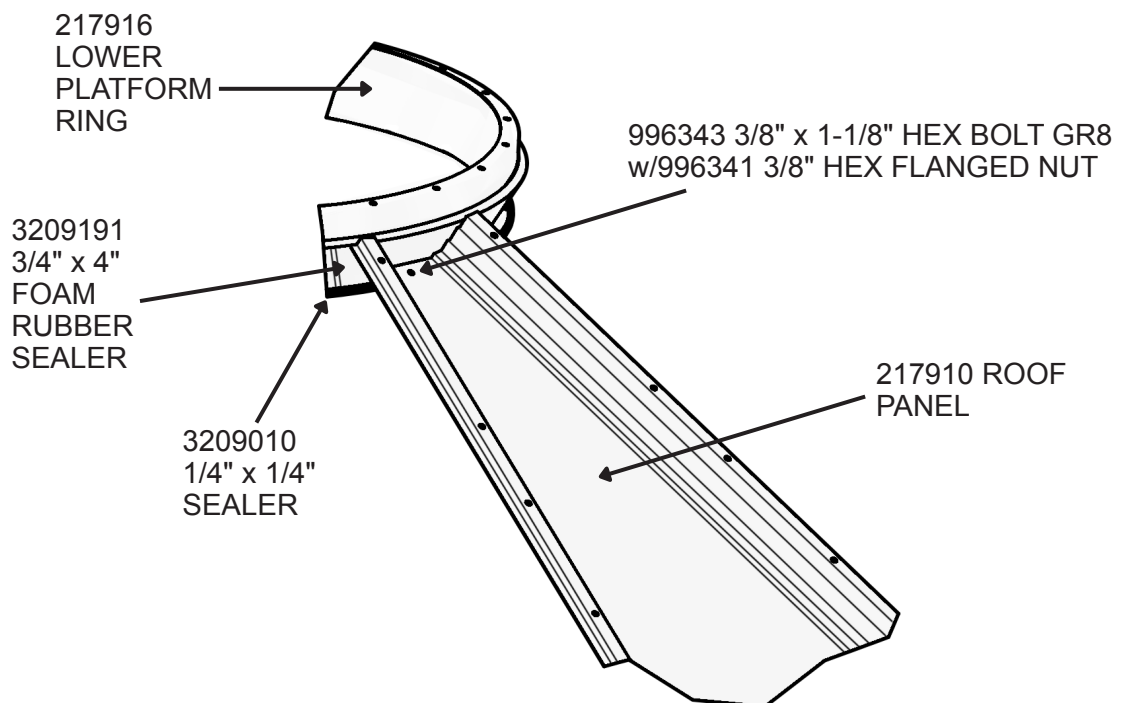
Roof Installation Details:

NOTE: Equipment used to support the Lower Platform Ring should be adjustable vertically and prevent any rotation of the Lower Platform Ring. The vertical adjustment may be required for the proper fit of all Roof Panels.

DETAIL 2

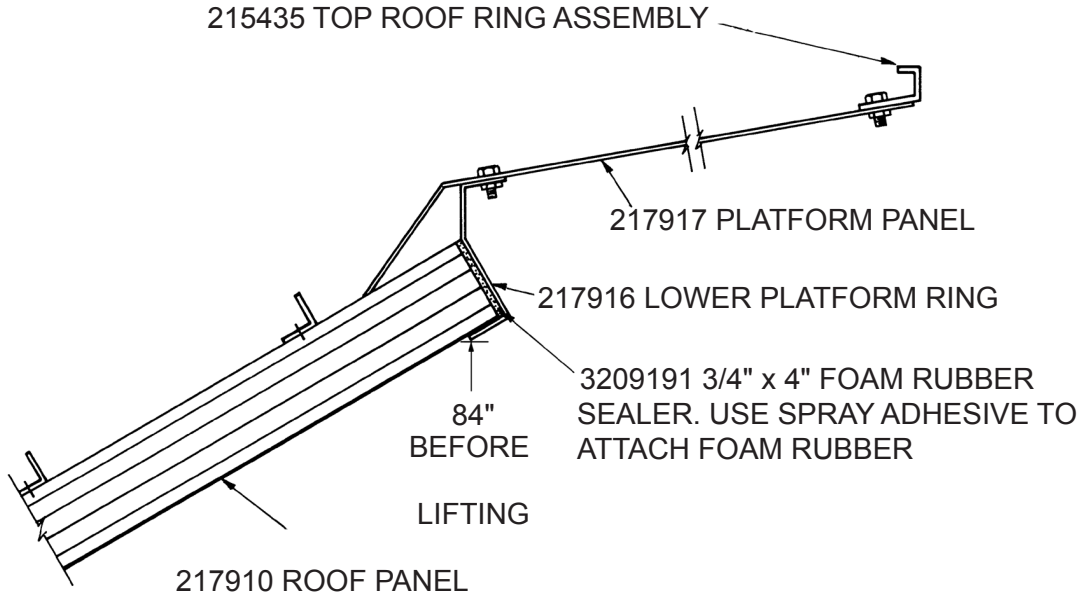


DETAIL 3

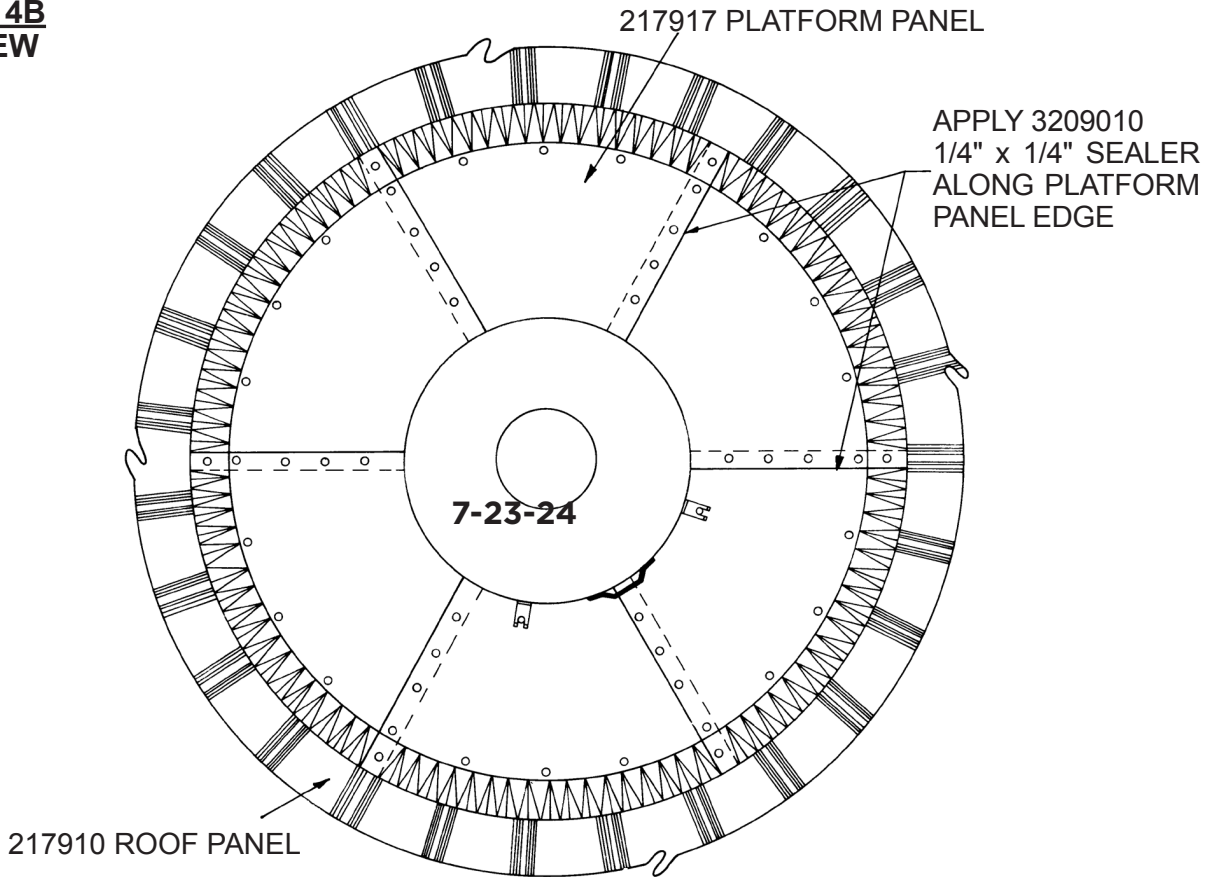


Installing Platform Panels and Top Ring:

DETAIL 4A
SIDE VIEW



DETAIL 4B
TOP VIEW



Hoisting Top Assemblies and Installing the Support Columns



CAUTION: The BinVista™ Gazebo is typically hoisted with a crane or telehandler. Lifting techniques and rigging differ based on personal experience, equipment, and the work crew. Behlen recommends using a licensed company to do the lifting.



NOTE: All equipment needs to be capable of lifting 2,000 lbs+.



NOTE: All lifting equipment needs to be OSHA/ANSI approved.



NOTE: Before lifting, the BinVista™ Gazebo should be cross-braced to prevent the top assembly from being distorted. The Wall Panels should only have bolts & nuts on the raised ribs on the outside of the panels. The rest of the bolts will be placed when the 20500009 Support Columns are installed.



NOTE: Make sure that all holes on the Support Columns are free of debris.

16

Hoist up the Top Assembly high enough to bolt (Bolt 996343, Nut 996341) the 5 Support Columns (20500009) to the side Wall Panels. The bottom edge should be 84"- 85" off grade.

17

Bolt (Bolt 996343, Nut 996341) the Angle Base Ring (217921) to the top and bottom of the first panel while it is lying on the ground (leave the end set of bolts out).

18

Bolt the first Wall Panel (217948) to the two Support Columns (20500009) starting **from the bottom up. See Detail 4C.**

19

Place the next bottom Base Angle Ring (217921) on the ground.

20

Working counter-clockwise, place the next Wall Panel up. Overlap the end two holes on the previous panel. Bolt the Top Base Angle Ring to the Wall Panel. **See Detail 4C.**

21

Continue to attach the 4 Wall Panels to the 5 Columns to complete the bottom wall assembly. After all the bolts are in place, tighten to the manufacturer's specs.

22

Attach Support Columns to the anchor bolts in the concrete according to the manufacturer's specs.

23

Install Roof Cap. **See Details 5-A and 5-B.**

NOTE: Cross square the side Wall Panels before installing the anchor bolts.

Hoisting Top Assemblies and Installing the Support Columns

24

Bolt the two cap latch plates on to the roof cap using the 1/4" bolt and 1/4" nut. **See Detail 5-B.**

25

Bolt the handle (2188001) on the top of the roof cap using 1/4" bolt (3188066) and 1/4" nut (2688019). **See detail 5-A.**

26

Insert both long ends of the slide cap rods (217760) through the two holes on the top roof ring. Thread a nut (3/8" Nut 996341) onto both rods to the end of the threads with the flange facing outwards. Slide both slide cap rods through the two holes on the side of the roof cap and secure with nuts (3/8" Nut 996341) to both sliding cap rods.

27

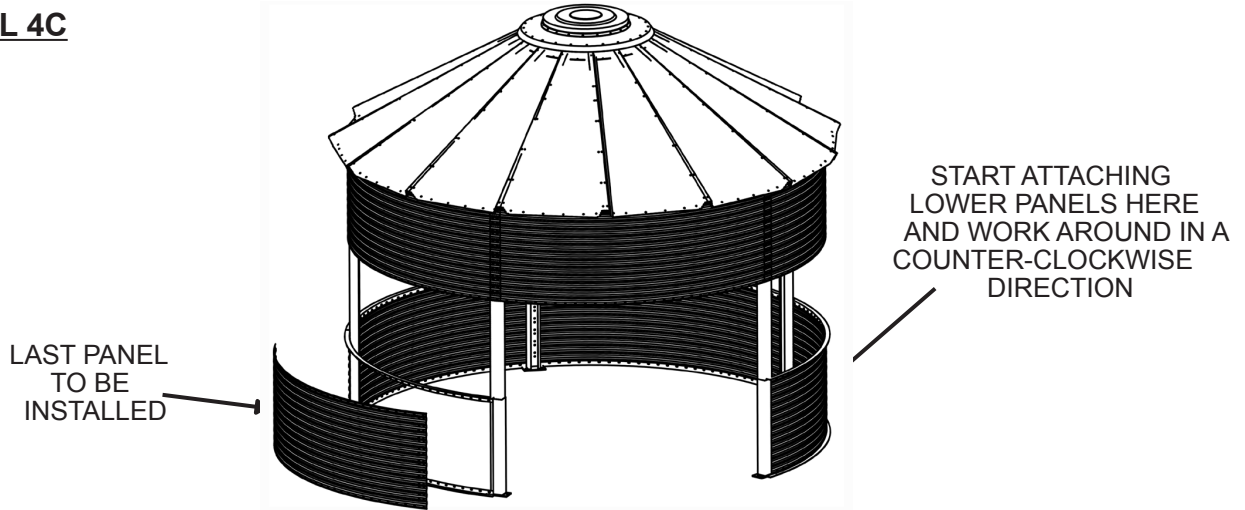
Attach two nuts (669341) to the short ends of the slide cap rods, with the nut's flange facing out. Push both slide cap rods through the top of the roof cap, install two nuts, and tighten down. **See Detail 5-A.**

28

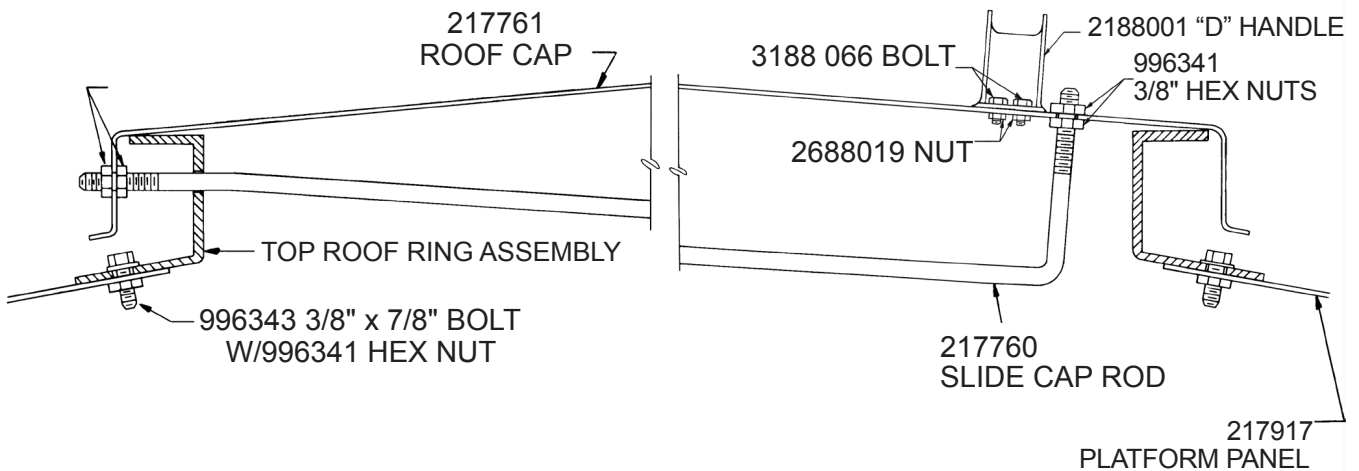
Install the two lid eye bolts (2268020) into the top roof ring where the cap latch aligns with the bolts on the top roof ring. Install the two wing nuts (2688020) onto the lid eye bolts. **See Detail 5-B.**

Roof Cap Installation

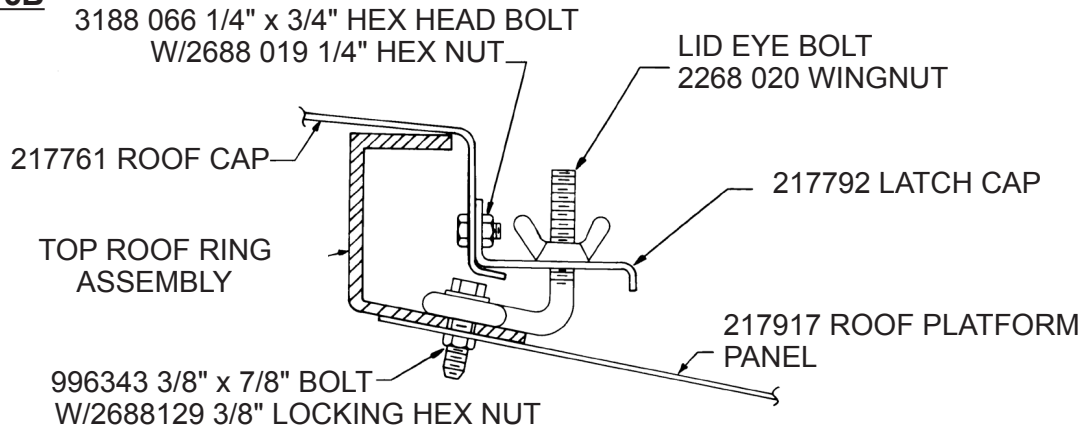
DETAIL 4C



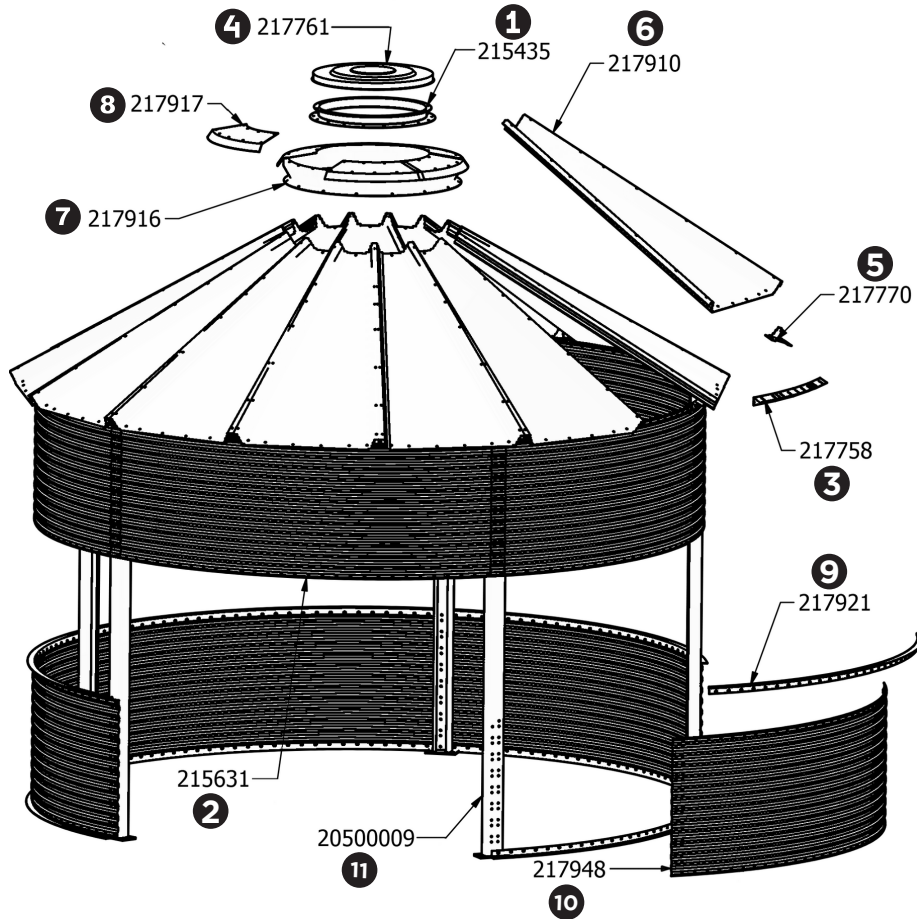
DETAIL 5A



DETAIL 5B



Parts Identification



PARTS LIST			
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	215435	Ring 18M Top Roof	1
2	215631	5M Galv. Wall Panel W/Logo	1
3	217758	14 Ga. Galv. Eave Angle	15
4	217761	Roof Cap	1
5	217770*	Bird Stop	15
6	217910	5M Bin Roof Panel	15
7	217916	5M Lower Platform Ring	1
8	217917	Roof Platform Panel	6
9	217921	5M Bin Base Angle	8
10	217948	5M Galv. Wall Panel	8
11	20500009	Galv. Support Column	5
*INCLUDED IN ROOF HARDWARE KIT			

20902500 BINVISTA HARDWARE KIT		
996341	Nut, 3/8 NC Heavy Hex Flanged	1120
996343	Bolt, HWH 3/8" x 1-1/8" GR8	950
3209010	ITW -Sealer 1/4" x 1/4" x 30'	30
1328456	Bolt, Anchor Wedge 1/2" x 5 1/2"	10
3948020	Washer, Fender 3/8"	15

219639 5 METER ROOF HARDWARE KIT		
1348063	Carton Cardboard 6 x 12 x 34	1
217760	Rod Cap, Sliding	2
217770	Bird Stop	15
217792	Latch Cap	2
217793	Eyebolt, Roof Cap	2
2188001	Handle, Door Pull D	1
2688019	Nut, 1/4-20 Hex ZP	8
2688020	Nut, Wing 3/8" NC	2
3188066	Screw, Hex 1/4-20 x 3/4" HHCS ZP	8
3209041	Sealer, Spray Adhesive	1
3209191	Sponge Rubber 3/4" x 4" x 25'	14
3948003	Washer, Wrought 3/8" Plated	4
2688129	Nut, Lock 3/8" ZP	2

Parts & Service Letter

TO: ALL FARM & COMMERCIAL DEALERS

SUBJECT: GALVANIZED MATERIAL STAIN

In this letter, please find recommended procedures for removing stain from galvanized material, as published by the American Zinc Institution.

We are making this available to you so that you may use any of these procedures if you so desire. However, Behlen Manufacturing Co. is neither agreeing with, nor objecting to any of the procedures outlined.

We are forwarding this information to you simply as a service in reference to stained material.

BEHLEN MFG. CO.


Materials for Removal of Wet Storage Stain as Recommended by the American Zinc Institute.


The three materials described below will effectively clean and brighten galvanized steel that has been storage stained or otherwise dulled in appearance. Because of different types and stages of storage stains, availability of cleaning facilities, and labor involved, wide variations of effectiveness will be encountered. In general, all three cleaners will restore the spangle of the stained galvanized steel to a more pronounced, lighter, silvery appearance than is found on recently galvanized steel.

In using any of these materials, safety precautions such as adequate eye protection, aprons, and rubber gloves should be used.

Tests have indicated that material No. 3 is the most effective in removing severe storage stain.

1	<u>Chromic Acid Solution:</u>
<u>Recommended Use:</u>	Removal of dark or varied-color stains and white milky stain as fingerprints.
<u>Formula:</u>	Make a solution by adding 48 oz chromium trioxide to a gallon of 0.5% nitric acid.
<u>Application:</u>	Saturated cloth or mop. Dipping of stained articles or sheets may be practical. Rise with water, 140° or warmer.

	<u>Sodium Hydroxide Solution:</u>
<u>Recommended Use:</u>	To clean and brighten galvanized steel dulled by weathering.
<u>Formula:</u>	Make a solution by adding 32 oz. of caustic soda (95% NaOH) per gallon of water. After reaction is complete, add 96 oz. of talc (French chalk).
<u>Application:</u>	Solution can be painted on with a nylon bristle brush. Rinse with water. Hot water is not necessary, but will aid in drying. Some scrubbing or painting action may be necessary during rinsing to remove all traces of solution.

	<u>Oakite - Hilite:</u>
<u>Recommended Use:</u>	Removal of area of very severe stain. Also a good cleaner and brightener for naturally dulled, galvanized steel.
<u>Formula:</u>	A commercial powdered cleaner and polish sold by the Oakite Products Col., 32 Rector St., New York 6, N.Y. Sales representatives found in most major cities.
<u>Application:</u>	Apply this powder with a damp cloth or sponge. Rinse with water. Hot water will aid in drying but is not necessary for removal of material.