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### **Memorandum:**

**To:** City of Florence Transportation Committee  
**From:** Clare Kurth, Assistant Planner  
**Meeting Date:** October 17, 2023  
**Subject:** Bus Shelter Design - Discussion

### **Introduction**

Lane Transit District (LTD), in partnership with the City of Florence, has been awarded a grant of \$75,000 with \$60,000 targeted in replacing existing bus shelters in the City along the existing Rhody Express service route. The plan is to replace at least 4 of the existing shelters. The Transportation Committee is being asked to consider design and amenities to help guide the final decision. The final location of the shelters to be replaced has not been determined, but the shelters at Grocery Outlet, Safeway (8<sup>th</sup> Street), Siuslaw Middle School (25<sup>th</sup> and Oak), and 43<sup>rd</sup> and Oak have been flagged as high priority for replacement. The Duo-Gard Industries, Inc product was selected as a preferred company as the products are made in the USA and are currently installed around the country including locations in Oregon.

### **Considerations and Preferred Materials:**

- Preferred materials that will stand up well in the coastal weather conditions are aluminum framing and polycarbonate side panels.
- These shelters come in 3 standard sizes 5x10, 5x12, and 6x12. The size may be determined by either the location and space available, or by the number of riders at a particular stop.
- Benches may be included for riders' comfort while waiting for the bus, but features should be considered to deter sleeping or loitering by non-riders.
- Lighting may increase the cost of the shelters, but may add security and deter loitering during off hours.

### **Questions to Guide Transportation Committee Discussion and Consideration:**

- Of the proposed shelter options which are your two preferred options and why?
- Of the following items, are these high, medium, or low priorities:
  - Lighting?
  - Ability to have art incorporated onto the shelters?
  - Closed sides on one, two, or three sides?
- Which of these shelters will be best suited for rider comfort in the Florence climate?

### **Attachments:**

- Duo-Gard Industries Bus Shelter and Descriptions
- Duo-Gard Bus – Transit Brochure
- Duo-Gard Benches – Design Brochure

# Rhody Express

## NORTH LOOP

Leave Florence Food Share	Bi-Mart	Fred Meyer	Arrive Grocery Outlet
8	9	10	1
10:38	10:45	10:47	10:58
11:38	11:45	11:47	11:58
12:38	12:45	12:47	12:58
1:38	1:45	1:47	1:58
2:38	2:45	2:47	2:58
3:38	3:45	3:47	3:58
4:38	4:45	4:47	4:58
5:38	5:45	5:47	5:58

## SOUTH LOOP

Leave Grocery Outlet	Dollar Tree/ Kozy Kitchen	Siuslaw Public Library	Peace Harbor Hospital	Old Town Park	Safeway	Three Rivers Casino	Arrive Florence Food Share
1	2	3	4	5	6	7	8
10:00	10:05	10:10	10:17	10:23	10:28	10:33	10:38
11:00	11:05	11:10	11:17	11:23	11:28	11:33	11:38
12:00	12:05	12:10	12:17	12:23	12:28	12:33	12:38
1:00	1:05	1:10	1:17	1:23	1:28	1:33	1:38
2:00	2:05	2:10	2:17	2:23	2:28	2:33	2:38
3:00	3:05	3:10	3:17	3:23	3:28	3:33	3:38
4:00	4:05	4:10	4:17	4:23	4:28	4:33	4:38
5:00	5:05	5:10	5:17	5:23	5:28	5:33	5:38

## RIDING FROM SOUTH TO NORTH

The Rhody Express operates a 60-minute circuit by first traveling the South Loop and then the North Loop.

If your destination is not on the loop on which you are boarding, remain on the bus as it switches to the next loop, and you will reach your destination.

## Title VI

"No person in the United States shall on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

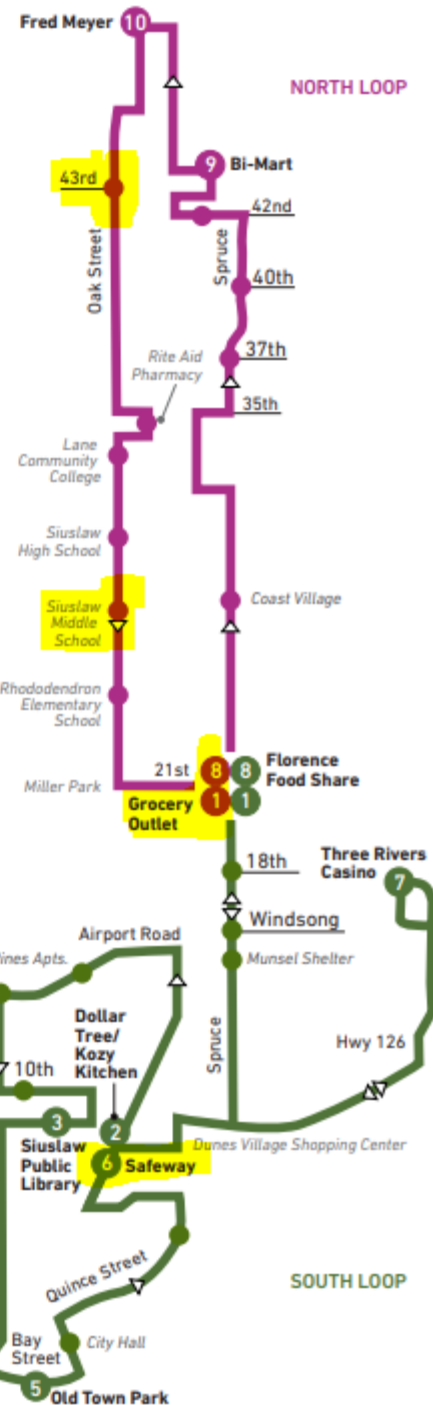
— TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

### LTD Respects Civil Rights

Any person who feels discriminated against on the basis of race, color or national origin while obtaining transit services or participating in transit activity may file a complaint.

To learn more about Title VI, visit [Justice.gov](https://www.justice.gov) | To file a complaint, visit [LTD.org/](https://www.ltd.org/) Title-VI-Policy-Statement or call 541-687-5555

[LTD](https://www.ltd.org/) | Lane Transit District





Reverse Barrel Vault Roof

The reverse barrel vault style is a newer roof style that has become increasingly popular. The roofing material can include standing seam metal, structured polycarbonate, solid polycarbonate or acrylic and laminated glass.



Single Slope Roof

Shelters with a single-slope roof are typically free-standing but can be attached to an existing structure. The roofing material can include standing seam metal, structured polycarbonate, laminated glass, FRP panels, 3" insulated panels, solid polycarbonate or acrylic.

The example above right, is of a single slope roof where the panels can have art of print.





Dome Roof with solar lighting options



Ready Ship Shelter—6x12 Barrel Vault Roof (Bronze)



Ready Ship Shelter—5x10 Barrel Vault Roof (Bronze)

Duo-Gard works with a variety of materials to ensure that the design and construction meets our aesthetic intent and the relevant building code requirements.

Although bus shelters are their passion, they realize that it's not always just about the shelters. Whether it's seating, lean rails, trash receptacles - or bike racks & bike shelters - Duo-Gard has a complete and diverse product offering that affords customers the convenience of a one-stop shop and lends to a cohesive product grouping for our project.





# bus & transit shelters

## SPACES IN HARMONY

Since 1984 Duo-Gard has created bus, transit, smoking and specialty shelters and enclosures. We investigate, evaluate and integrate global technologies and innovations to ensure the very best for our customers and the environment. We even introduced a comprehensive line of standard bike shelter models. We've been breaking the boundaries of the traditional 5 x 10 brown box shelter by going well beyond the norm. Our products are specified by architects, transit officials and facility managers for major municipalities, military bases, government offices, hospitals, office buildings and factories and are installed in all 50 states. The reason is simple: We help our customers reach their goals for aesthetics, performance & economy by providing innovative designs and sizes that meet and even exceed the requirements of any project.

## WHAT'S IN IT FOR YOU

- Contribute to sustainability
- Increase ridership potential
- Enhance your city's image
- Create a workable budget
- Develop a signature look for your transit program
- Collaborate with a proven industry leader

## WHAT WE BRING TO THE PARTY

- Unique architectural appeal
- Accommodation for site requirements
- Complements to existing designs
- UV protection and 100% recyclability with polycarbonate
- Engineered for wind & snow loads
- LEED compliant products
- Engineer-stamped designs
- Delivery & installation in all 50 states



ALBANY, NY



BOWLING GREEN, OH



HAMPTON, VA



MINNEAPOLIS, MN

MARJORIE PITZ, ARTIST, ©MINNEAPOLIS ART IN PUBLIC PLACES

## IMAGE IS EVERYTHING

The structures you put up on your property reflect who you are and the level of dedication you have toward the people who use them and the environment. That's why we have 8 in-house design engineers who team with our architects and outside professionals to work with you to develop branding and to execute your signature project. Whether it's part of a streetscape, landscape or individual building project, we can help you portray the image you desire to your residents and visitors at a reasonable price.

## LIGHTEN UP

Why not use our natural resources to enhance your project? Duo-Gard can design and integrate a complete package of solar-powered lighting with LEDs for effective illumination and energy savings - even lit ad boxes. Freestanding pole-mounted, roof-mounted units or standard lighting packages. How much light do you want? What kind of light distribution do you need? How much sunlight does your geographical location offer? Our specialists take all of these factors into consideration to develop strategies custom designed for your location & requirements.

## KEEP YOUR OPTIONS OPEN

- Open, partially enclosed or fully enclosed structures
- Custom glazing options
- Variety of colors available
- Special features including solar LEDs/PVs, Lumira® aerogel & ad messages





## WHAT'S HOT NOW

Bus Rapid Transit Programs (BRTs) are gaining steam across the country and around the world. They are high-quality, bus-based transit corridors that provide fast, comfortable and cost-effective mobility. We see growth in opportunities with BRTs transporting large quantities of passengers. Our specialists work with municipalities to develop tailor-made programs, which range from customizing a standard bus station program to creating a completely custom product grouping.



ALBANY, NY



ALBANY, NY



SAYREVILLE, NJ

## WE MAKE BIGGER BETTER

- A team with over 250 years of combined transportation experience
- Specialists in large shelter construction
- Standard shelter construction efficiencies to create one-of-a-kind results
- Integrated branding, signage
- Solar LED lighting packages
- In-house aluminum & steel fabrication
- Turnkey services - design, engineer, fabricate & install



TAMPA, FL



MAPLE GROVE, MN



## WINNING STRATEGIES

Duo-Gard brings new light to passenger shelters and stations by applying natural daylighting strategies. Lumira® aerogel can be used in shelter roofs and walls to gain high diffuse light, add insulation values, eliminate mold and moisture and minimize solar glare.

## WE'VE GOT THE GOODS

Duo-Gard is one of just a few manufacturers with in-house fabrication capabilities for both aluminum and steel. We provide a full spectrum of possibilities for our customers so we can specify what is most appropriate for your geographic location, climate, aesthetic requirements and structural needs. We don't need to design your structure around any particular material because we offer options. Whether your project calls for aluminum or steel we can design, engineer and fabricate the complete project without having to rely on outside contractors and the additional costs associated with outside suppliers.

## SPECIAL TREATMENT

Duo-Gard has a wide array of options and strategies in our arsenal to enhance and customize your shelter project.

- Nanoglass
- Translucent powder coat technology
- Kynar finish
- Anodized finish
- Wood-grain powder coating
- Anti-graffiti coatings
- Vandal-resistant strategies
- Electrical lighting,
- Heating & A/C packages





## ACCESSORIZE LIKE YOU MEAN IT

Although they're our passion, we realize that it's not always just about the shelters. Whether it's seating, lean rails, trash receptacles, ash urns - or bike racks & bike shelters - Duo-Gard has a complete and diverse product offering that affords our customers the convenience of a one-stop shop and lends to a cohesive product grouping for your project.



## THE WHOLE ENCHILADA

- Site furnishings
- Signage
- Wide array of bench styles
- Trash receptacles
- Ash urns & lighters
- Bike shelters
- Bike racks



## GET CONNECTED WITH PRE-WIRED SYSTEMS

- Complete electrical & lighting
- Heaters
- Air conditioners
- Exhaust fans
- Automatic door openers/closers
- Electronic controls: photocells, motion sensors, timers



## COME TO YOUR SENSES

Duo-Gard and nationally renowned artist Vara Kamin have collaborated on a new concept for bus and transit stations to create sensory art to enhance public transportation's physical environment. This sensory art can be applied to contribute to your signature look, reduce passenger stress and create a more positive rider perception.



## YOU GOTTA HAVE ART - SENSORY ART

- Shapes passenger experience
- Helps reduce passenger stress
- Contributes to a sense of community
- Creates positive rider perception
- Supports respect for shared space
- Engages riders with special visual focus



## BUSINESS AS USUAL

- Cutting-edge materials
- New technologies
- Insulating Lumira® aerogel
- Powder coat finishing
- Exquisite branding capabilities



## YOU DREAM IT. WE BUILD IT.

Forge ahead with us to achieve creative, collaborative and inventive solutions in creating a better planet.

Call us today at 734.207.9700 or email at [info@duo-gard.com](mailto:info@duo-gard.com)



Member of  
The American  
Institute of Architects



# Benches

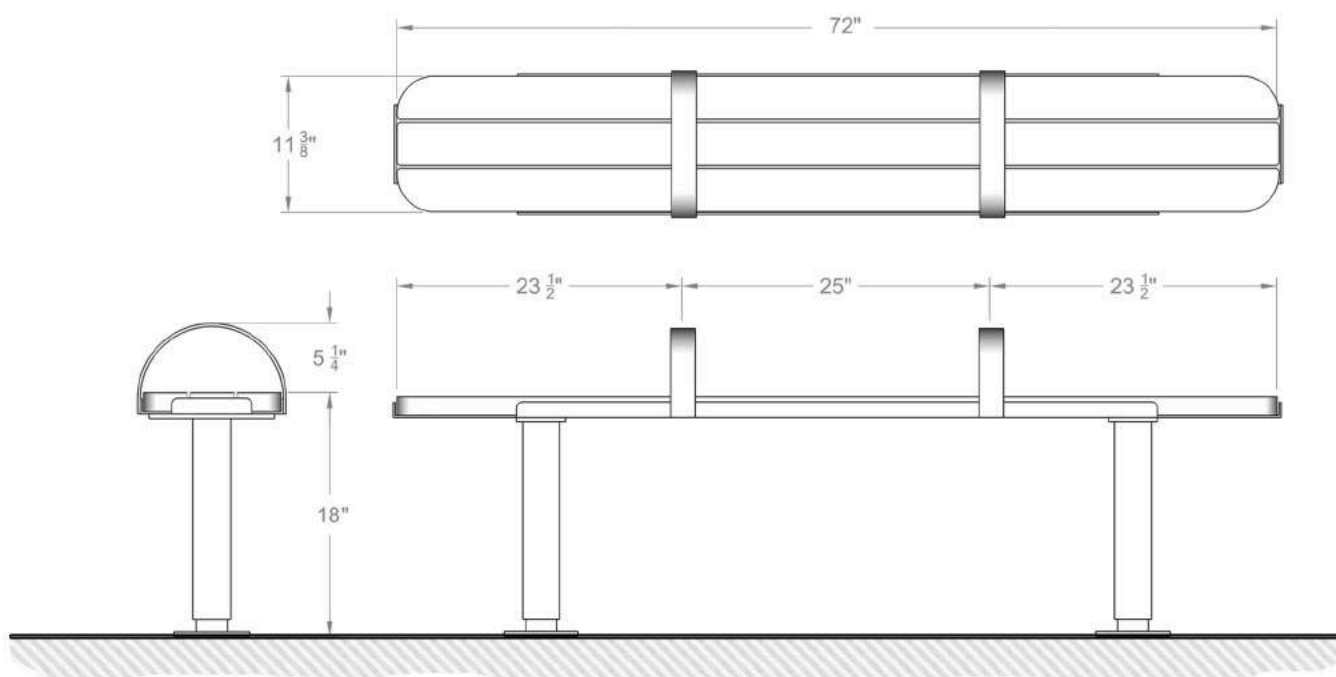
select your design





**PRODUCT INFO:**

- **MATERIALS:**  
Welded and fastened aluminum assembly  
Recycled plastic lumber
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Length: 72in [182.88cm]  
Width: 11.375in [28.89cm]
- **OPTIONS:**  
Armrest / Seat Dividers  
Hardwood Lumber
- **FINISH OPTIONS:**  
Powdercoat paint  
Tnemec paint

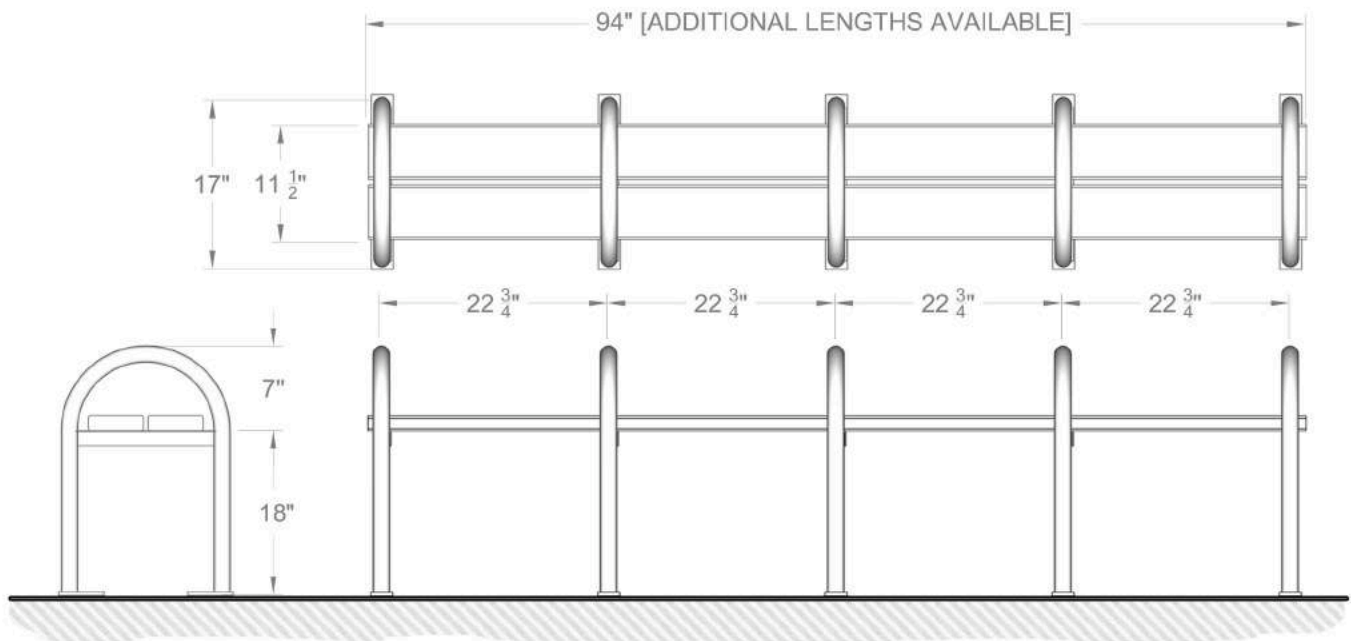


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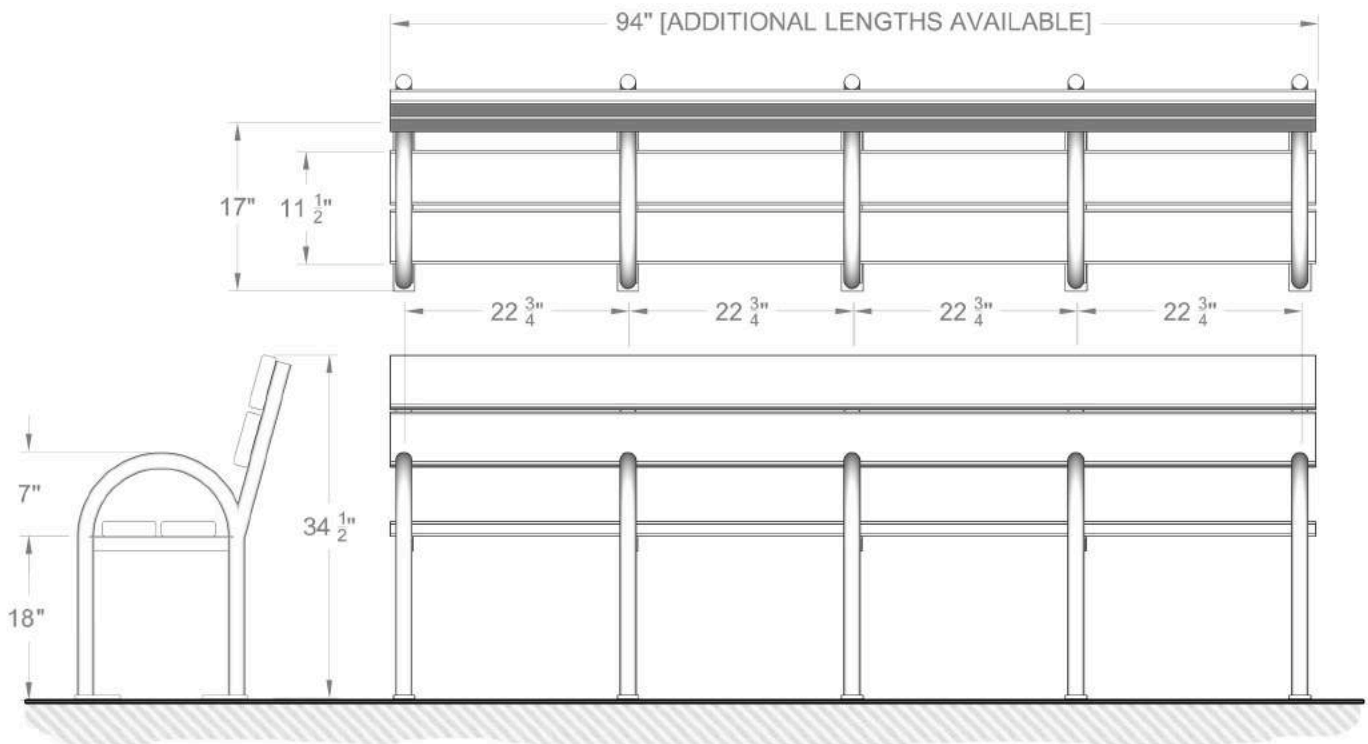
- **MATERIALS:**  
Welded and fastened aluminum  
Extruded aluminum slats
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Lengths: 24in, 48in, 72in, 94in, 117in  
Width: 11.5in [29.21cm]
- **OPTIONS:**  
Recycled plastic lumber  
Hardwood lumber
- **FINISH OPTIONS:**  
Powdercoat paint  
Tnemec paint  
Anodized aluminum



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**PRODUCT INFO:**

- **MATERIALS:**  
Welded and fastened aluminum  
Extruded aluminum slats
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Backrest Height: 34.5in [87.63cm]  
Lengths: 24in, 48in, 72in, 94in, 117in  
Width: 11.5in [29.21cm]
- **OPTIONS:**  
Recycled plastic lumber  
Hardwood lumber
- FINISH OPTIONS:**
  - Powdercoat paint
  - Tnemec paint
  - Anodized aluminum

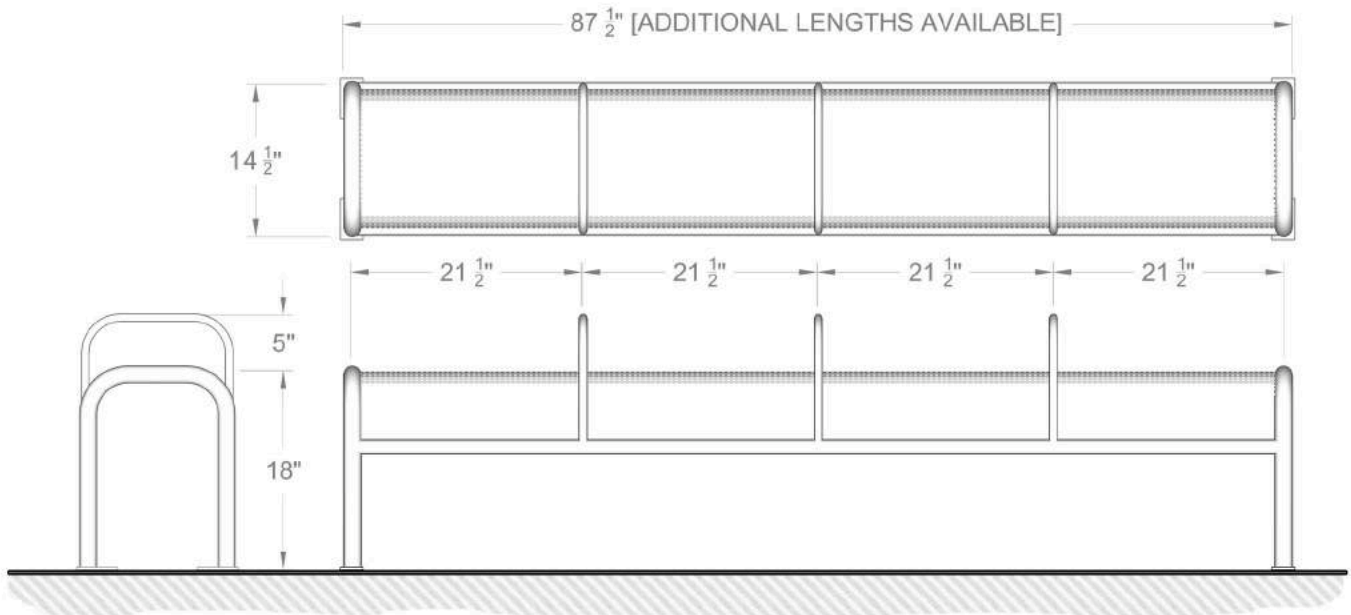


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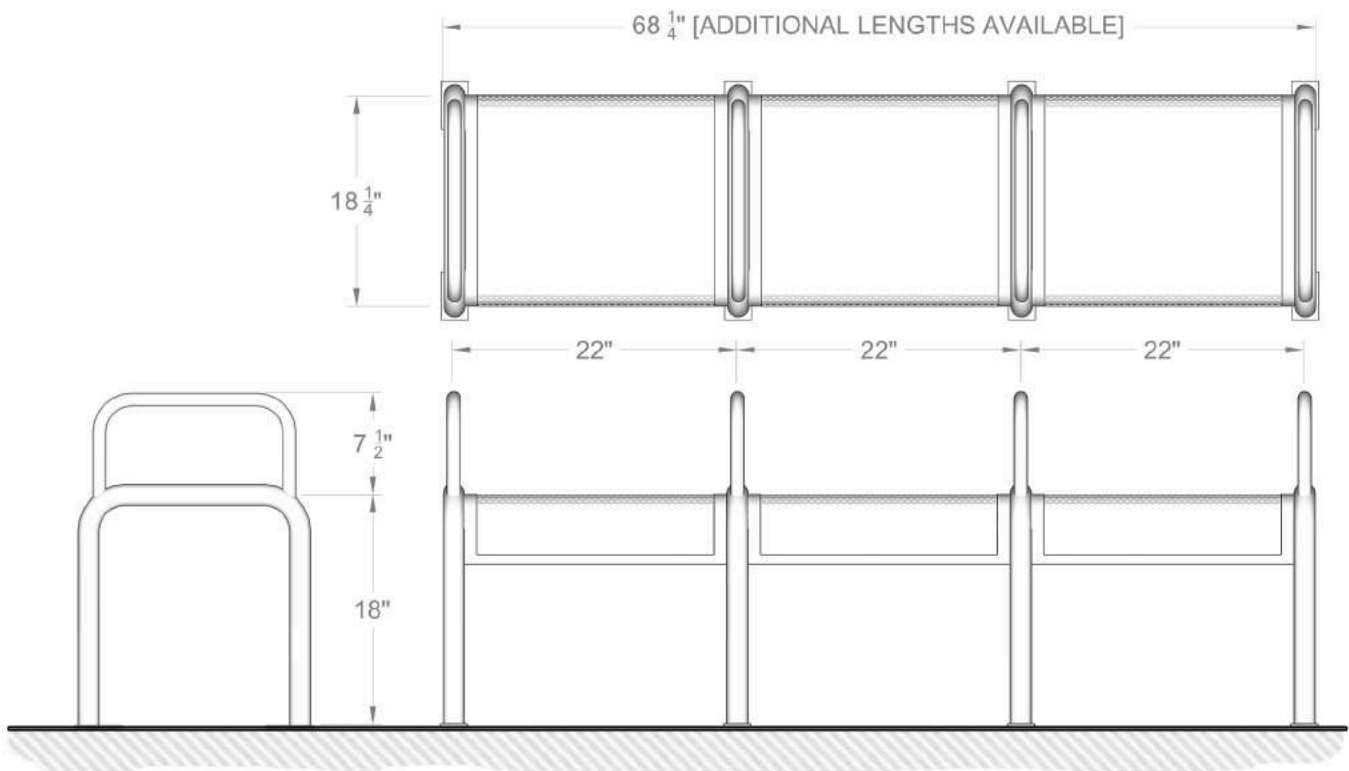
- **MATERIALS:**  
Welded aluminum assembly  
Perforated aluminum
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Length: 48in [121.92cm]  
Width: 14.5in [36.83cm]
- **OPTIONS:**  
Perforated patterns
- **FINISH OPTIONS:**  
Powdercoat paint  
Tnemec paint  
Anodized aluminum



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**PRODUCT INFO:**

- **MATERIALS:**  
Welded aluminum assembly  
Perforated aluminum
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Length: 24in, 46in, 68.25in  
Width: 18.25in [46.35cm]
- **OPTIONS:**  
Perforation patterns
- FINISH OPTIONS:**
  - Powdercoat paint
  - Tnemec paint
  - Anodized aluminum

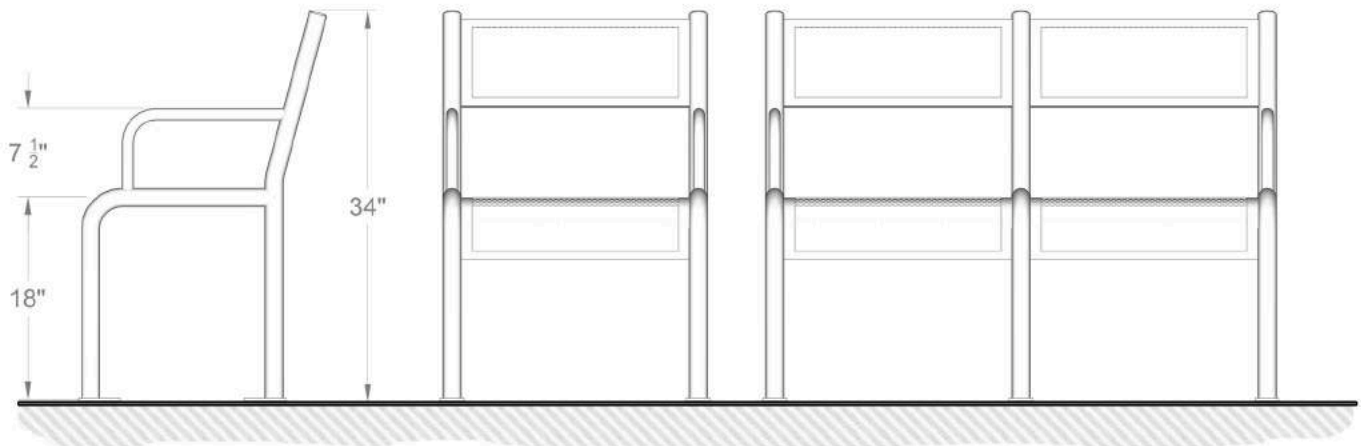
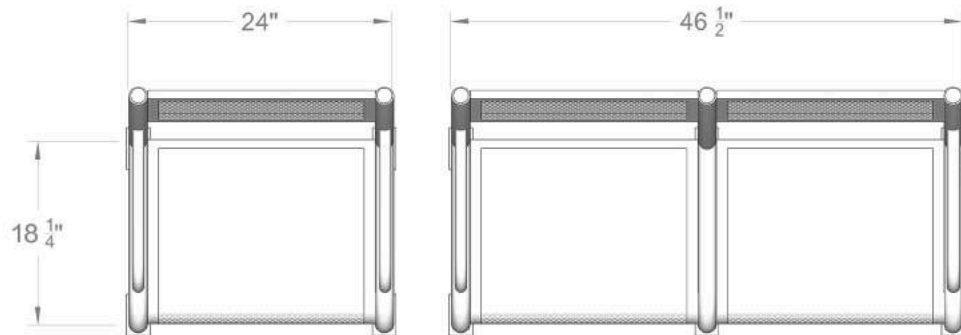


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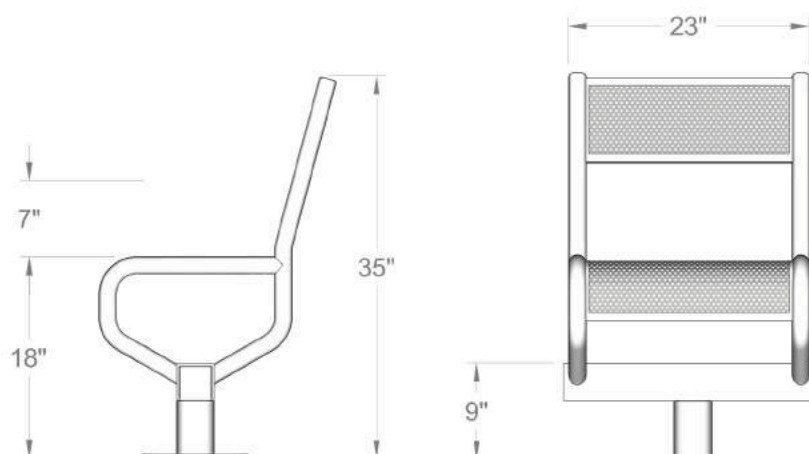
- **MATERIALS:**  
Welded aluminum assembly  
Perforated aluminum
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Backrest Height: 34in [86.36cm]  
Lengths: 24in, 46.5in  
Width: 18.25in [46.35cm]
- **OPTIONS:**  
Alternative lengths  
Perforation patterns
- **FINISH OPTIONS:**  
Powdercoat paint  
Tnemec paint  
Anodized aluminum



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Welded aluminum assembly  
Perforated aluminum
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Backrest Height: 35in [88.9cm]  
Length: 23in [58.42cm]  
Width: 21.5in [54.61cm]
- **OPTIONS:**  
Armrests  
Perforation patterns
- **FINISH OPTIONS:**  
Powdercoat paint  
Tnemec paint

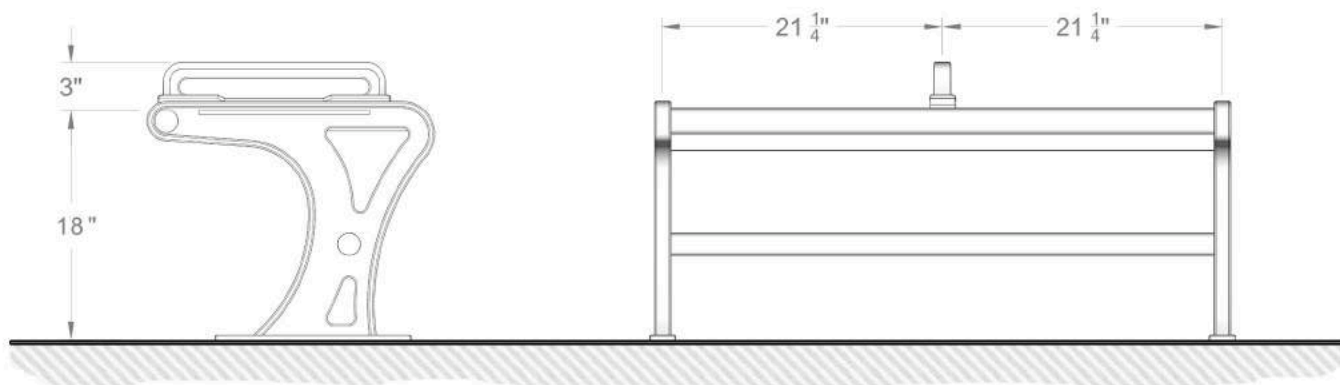
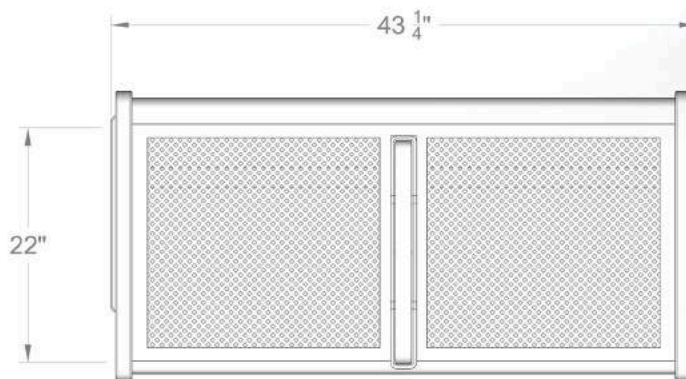


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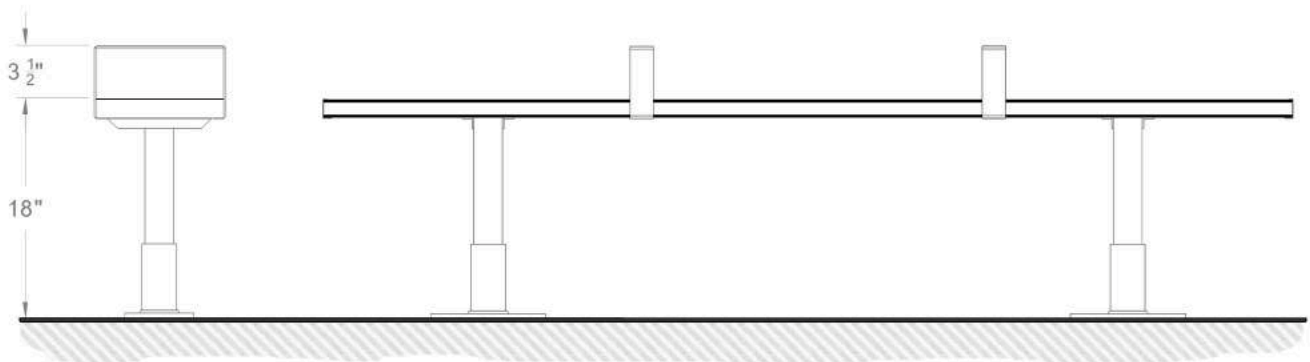
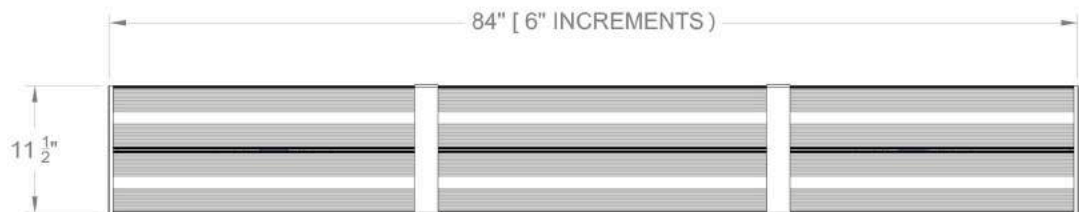
- **MATERIALS:**  
Welded aluminum assembly  
Perforated aluminum  
Solid cast aluminum ends
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Length: 43.25in [109.855cm]  
Width: 22in [55.88cm]
- **OPTIONS:**  
Perforation patterns
- **FINISH OPTIONS:**  
Powdercoat paint  
Tnemec paint



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Welded and fastened aluminum  
Extruded aluminum slats
- **INSTALLATION:**  
Prefabricated assembly secured w/ wedge anchors
- **DIMENSIONS:**  
Sitting Height: 18in [45.72cm]  
Lengths: 48in (then increments of 6in)  
Width: 11.5in [29.21cm]
- **OPTIONS:**  
Alternative lengths  
Wood slats  
Armrests, seat dividers  
Recycled plastic lumber
- **FINISH OPTIONS:**  
Powdercoat paint  
Tnemec paint  
Anodized aluminum



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