

Exhibit H

EOS Material Legend

Dryvit custom brick brochure	2-9
Sound Stages	
Elevation tag - EIFS 1	
Dryvit Outsulation brochure	10-25
Sound Stages	
Elevation tag - EIFS 2	
Ascent R-Loc panel brochure	26-29
Sound Stages	
Elevation tag - PEMB	
Naturescreen brochure	30-37
Sound Stages	
Elevation tag - VEG 1	
Parking Deck	
Elevation tag - SCREEN	
AEC Sliding Door brochure	38-46
Sound Stages	
20'x20' sliding acoustic doors	
Clopay brochure	47-48
Mill Shop 01 & Mill Shop 02	
20'x16' overhead doors	
Wardrobe	
8'x10' overhead door	
YKK window brochure	49-50
Mill Shop 01 & Mill Shop 02	
10'x4' clerestory windows	
Wardrobe	
5'x4' windows	
Central Seam Plus brochure	51-54
Sound Stages	
Roof plan tag - C	



DRYVIT CUSTOM BRICK™

*The Classic Look of Brick, from an Environmentally-Superior,
Cost-Effective, Lightweight Alternative*



Custom
BRICK™

 **Dryvit™**



Custom Brick™ is an exciting alternative from Dryvit®, the nation's leading manufacturer of exterior insulation and finish systems. This dramatic finish provides a beautiful effect that will leave even the most experienced mason shaking his head in disbelief. The look of Custom Brick is simply amazing, and it has numerous advantages over other exterior cladding options.

Custom Brick is a textured finish applied using a template to create a stunning finish. It is available in a wide variety of patterns, colors, textures and shading techniques that can be used to make your building look exactly the way you want it to. No more settling for the design limitations of other exteriors — or their excessive price — in getting exactly the look you want.

FEATURE	BENEFIT
■ Realistic brick masonry aesthetic	Inexpensively emulates labor-intensive masonry
■ Lightweight	Reduces structural demands for exterior facade
■ 14 standard templates	Ready supply of most popular designs
■ Custom templates available	Ability to match most existing patterns and textures
■ Multiple thicknesses of templates	Ability to create and shape deeper grout lines
■ Vapor-permeable	Will not trap moisture vapor
■ 100% acrylic	Greater flexibility for crack resistance and longer life
■ Exterior or interior application	Adds natural texture and color to multiple surfaces
■ DPR & PMR chemistry	Resistant to dirt and the growth of mold and mildew



Brown Street Station Condos | Forest Park, IL

“We wanted an antique brick look that you just couldn't get in this area without paying a fortune and waiting forever to get it. Custom Brick provided a perfect — and accessible — solution.”

John Ailport, *General Superintendent*, Silver Moon Properties



Marriott Residence Inn | Salt Lake City, UT

“Custom Brick saved the owner over \$200,000 by eliminating the heavier footings and framing needed for the clay brick. “We are extremely pleased with the appearance of the finish.”

Woodburn Associates, *Owner*

A TEMPLATED BRICK APPEARANCE FOR ANY WALL.

Value:

Low installed cost, and a 30-year lifecycle

Lightweight:

Approximately 1/35th the weight of clay brick

Design Freedom:

Ultimate flexibility with color, texture and shapes

A Dryvit® Outsulation® system with Custom Brick™ finish provides an environmentally superior, cost-effective alternative, all from a single source.

Now *that's* a better brick!

INSTALLATION OVERVIEW:

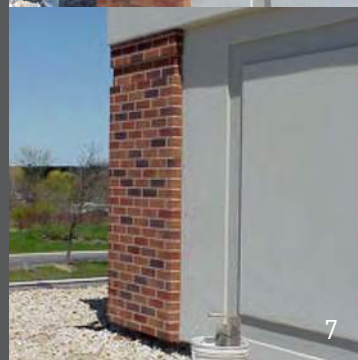
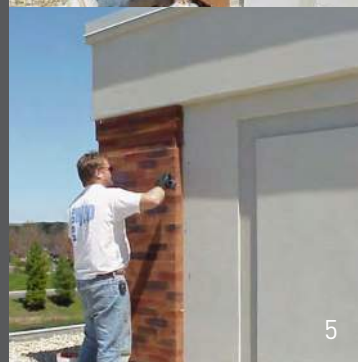
1. Prepare surface
2. Apply grout coat
3. Adhere selected Custom Brick template
4. Mix, then apply selected Custom Brick Finish material evenly
5. Create custom shading and effects (*optional*)
6. Remove templates and touch-up, if needed
7. Allow to dry



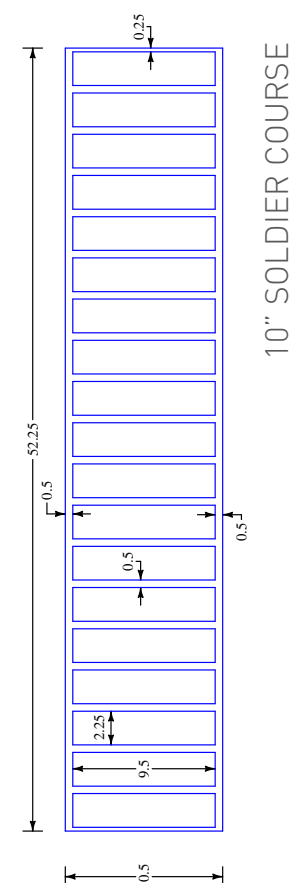
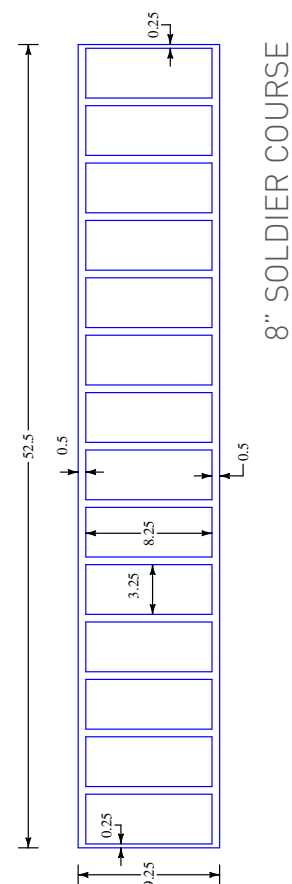
Isringhausen Imports | Springfield, IL

“The owner liked the renovated showroom so much he decided to re-clad his other brick building with Custom Brick because it looked better than the original brick.”

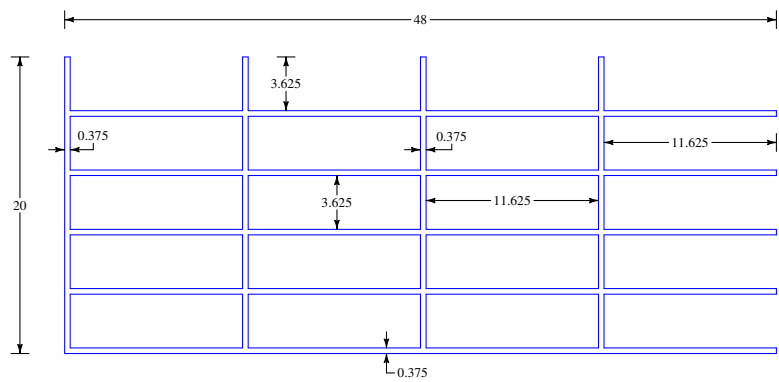
Custom
BRICK™



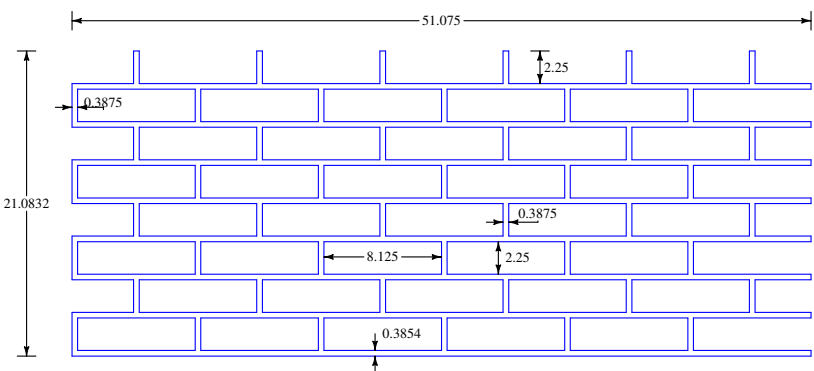
TEMPLATES



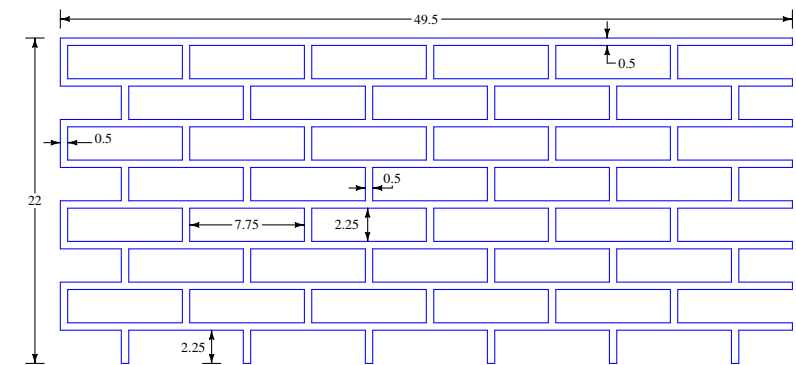
TEMPLATES



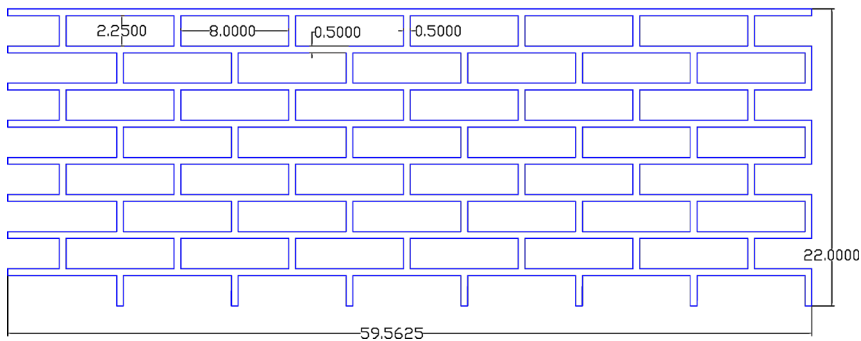
COLONIAL MALL



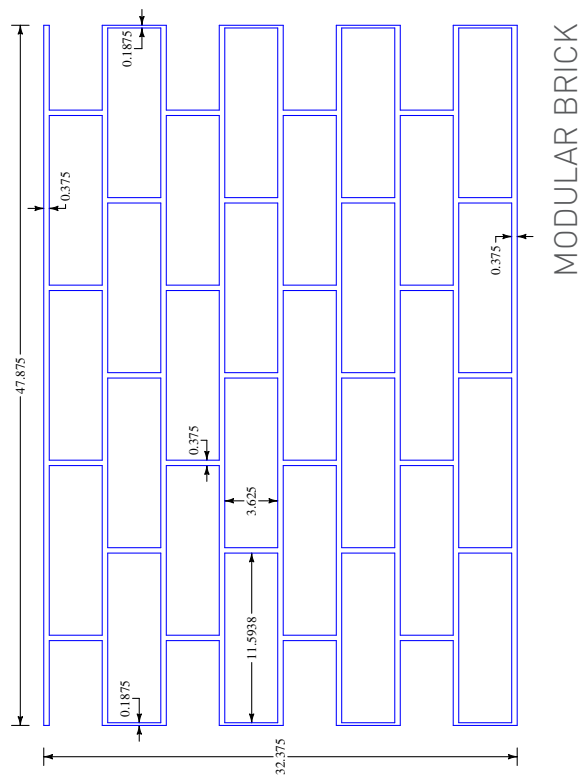
NY WALL BRICK 3/8"



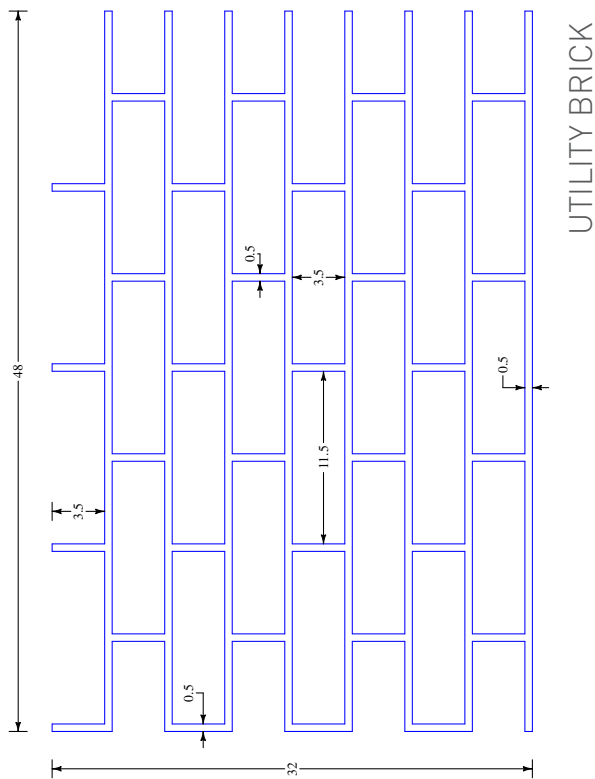
REGULAR FACE BRICK



BROOKLYN BRICK 1/2"

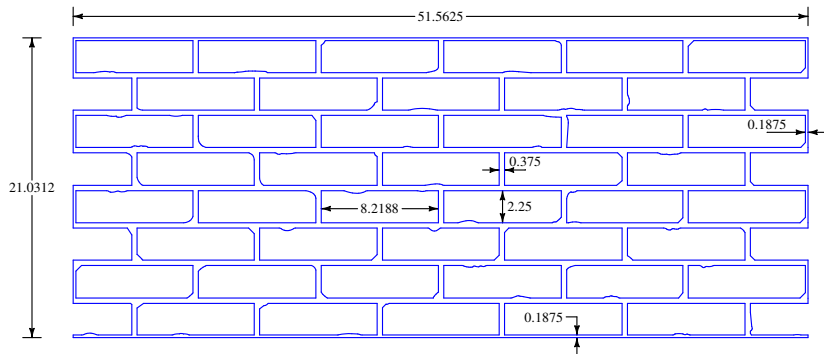


MODULAR BRICK

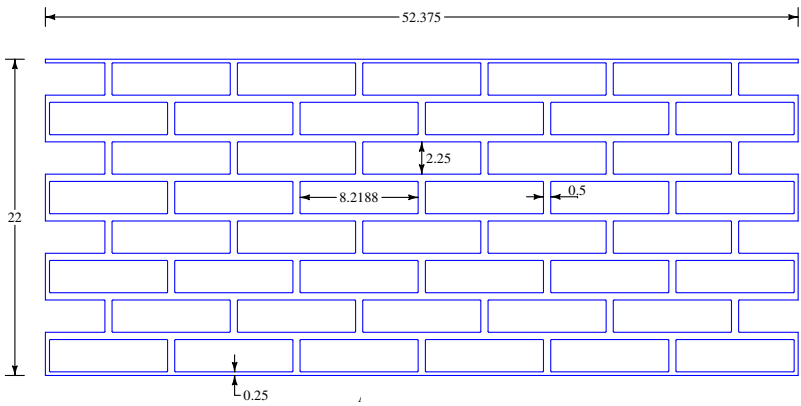


UTILITY BRICK

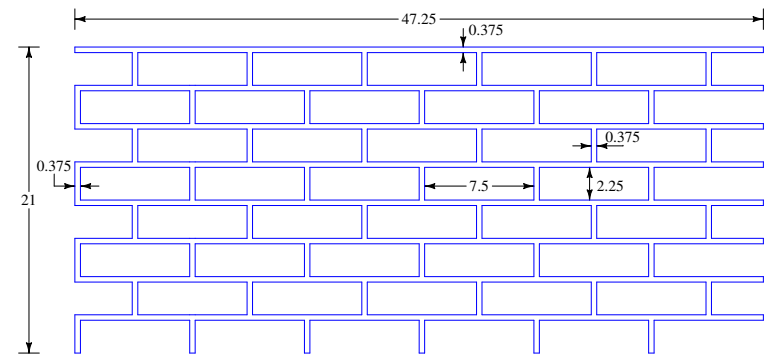
TEMPLATES



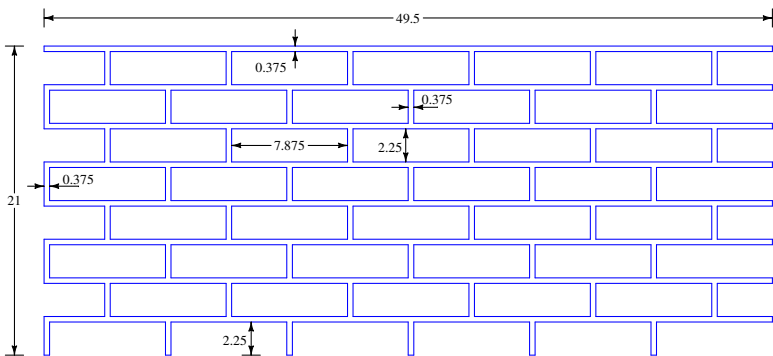
USED WALL BRICK



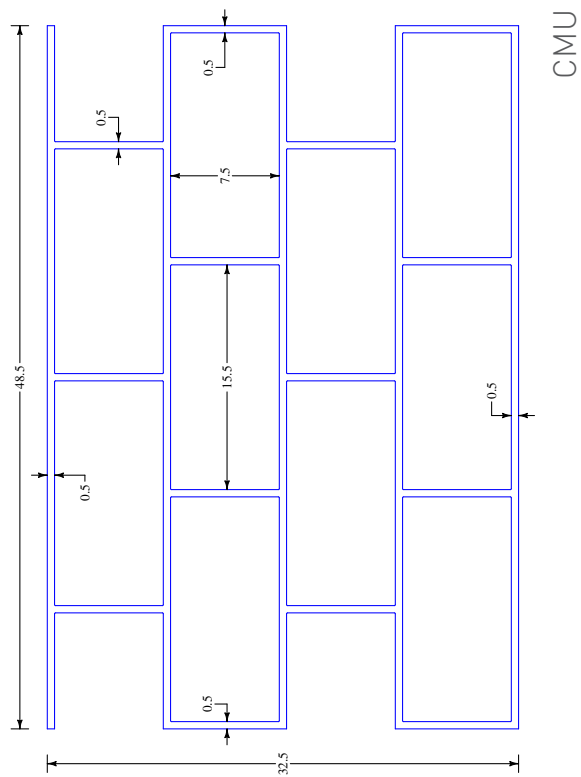
WALL BRICK



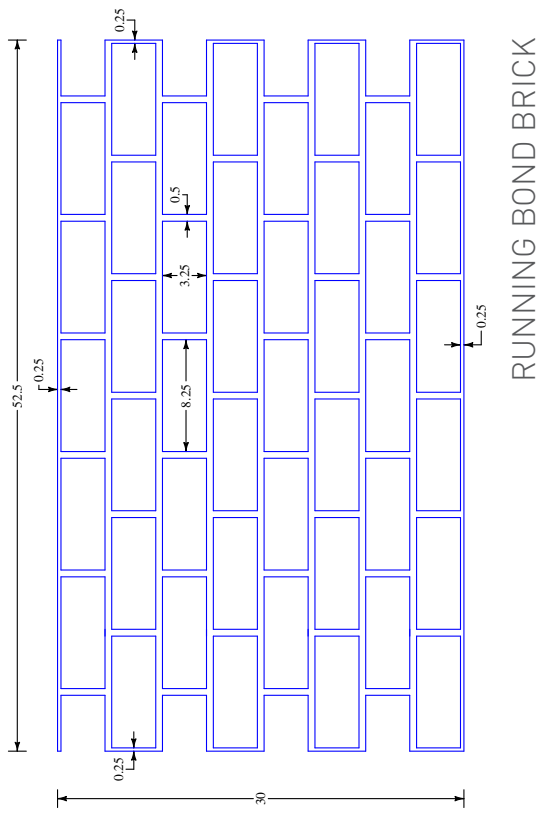
EASTERN BRICK



CALIFORNIA FACE BRICK



CMU



RUNNING BOND BRICK

PATTERN DETAILS

Pattern Name	Total Size	Avail. Depths	Ft ² / piece	Ft ² / box	Pcs. /box
Colonial Mall	20" x 48"	24pt / 60pt	6.67	400	60
NY Wall Brick 3/8"	21.08" x 51.08"	24pt / 60pt	7.48	403	54
Utility Brick	32" x 48"	24pt / 60pt	10.67	405	38
Running Bond	29.5" x 52"	24pt / 60pt	10.94	404	37
8" Soldier Course	9.25" x 52"	24pt / 60pt	3.37	404	120
10" Soldier Course	10.375" x 52"	24pt / 60pt	3.81	400	105
Wall Brick	22" x 53"	24pt / 60pt	8.00	400	50
Used Wall Brick	21" x 52"	24pt / 60pt	7.52	406	54
Modular Brick	32.5" x 48"	24pt / 60pt	10.76	408	38
CMU	32.5" x 48.5"	24pt / 60pt	10.95	405	37
Eastern Brick	21.5" x 48.25"	24pt / 60pt	7.20	403	56
California Face Brick	21" x 49.5"	24pt / 60pt	7.22	404	56
Regular Face Brick	22" x 49.5"	24pt / 60pt	7.56	400	53
Brooklyn Brick 1/2"	22" x 59.5625"	24pt / 60pt	9.10	450	50



Second National Bank | Arcanum, OH

VERSATILE DESIGN CAPABILITY FOR ANY PROJECT

Custom Brick is available in 14 standard brick designs with a wide array of standard colors. Custom colors are also available to tailor to your project's specifications, and custom patterns can be made. Custom template options are quoted separately and minimum order quantities apply, with slightly longer lead times. Contact your Dryvit Representative or distributor for a quote.

Examples of standard templates:



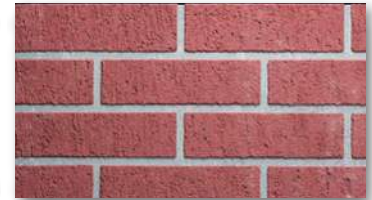
Used Wall Brick



NY Wall Brick 3/8"



Utility Brick



Regular Face Brick



Germantown, LLC | Nashville, TN



Vanderbilt University | Nashville, TN

Dryvit Systems, Inc. | One Energy Way | West Warwick, RI, 02893 | 401.822.4100 | dryvit.com

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Construction Products Group

tremcocpg.com



TECHNICAL DATA SHEET

Custom Brick™ Finish

Finish For Vertical Applications
DS227

PRODUCT DESCRIPTION

Custom Brick is the newest exciting innovation from Dryvit, the nation's leading manufacturer of exterior insulation and finish systems. A simply spectacular look - This dramatic finish provides a breathtaking and beautiful effect that will leave even the most experienced mason shaking his head with amazement. The look of Dryvit Custom Brick is simply spectacular, as are the numerous and varied advantages over other exterior cladding options. Imagination is your only limitation - Custom Brick offers a wide array of patterns, colors, textures and shading techniques that together can be used to make your building look exactly the way you want it to. No longer will you have to settle for the design limitations of other exteriors or be shackled by the high price of getting just the look you want. Let your imagination be your guide.



ADVANTAGES AND USES

- Custom Brick Is Better Than Traditional Brick
- Lighter weight
- Greater design flexibility
- Energy saving
- Limitless pattern, texture, color options
- Apply over numerous surfaces
- Perfect for interiors
- Excellent for renovation work

FEATURES & BENEFITS

FEATURE

- Realistic brick masonry aesthetic
- Lightweight
- 10 standard templates
- Custom templates available
- Multiple thicknesses of templates
- Vapor permeable
- 100% acrylic
- Exterior or interior applications
- DPR; PMR chemistry

BENEFIT

- Inexpensively emulates labor-intensive masonry
- Reduces structural demands for exterior façade
- Ready supply of most popular designs
- Ability to match most existing patterns and textures
- Ability to create and shape deeper grout lines Will not trap moisture vapor
- Greater flexibility for crack resistance and longer life
- Adds natural texture and color to multiple surfaces
- Resistant to dirt and the growth of mold and mildew

EXTERIOR

Save a ton in construction costs: Custom Brick's beauty is more than skin deep. Because it is much lighter in weight than traditional brick, there can be great savings on foundation and structural requirements needed to carry the building load. Faster construction overall, and, no nets are needed to protect passersby from falling bricks. All of which leads to safe, less costly construction.

Not your father's brick: The cost-effective design options of traditional brick are very limited. This is one contributing factor to the explosive growth in popularity of Dryvit. Now, not only can you have all the architectural details you want and are accustomed to getting with Dryvit, you can give your project a durable Custom Brick finish as well.

Energy conservation is cool: People didn't associate "brick" with "energy savings"... until now. Use the CustomBrick finish with any Dryvit system and enjoy all the benefits of additional insulation on the outside of the building where it is most effective. All this and the "traditional" look of brick, too!

No need to bend on design: Whether your project is a pool house or a palace, design is important. Custom Brick patterns can be

created specifically to meet your exact need. There are virtually no limitations to size, shape, color or texture. You dream it; Dryvit Custom Brick can achieve it.

'Versatile brick' no longer an oxymoron: Custom Brick finish works great as a finish for any Dryvit system. It can also be a great finish for all types of stucco, untreated masonry and tilt-up concrete.

Renovate, Renovate, Renovate: There is nothing like a new look to spruce up an old building. Let alone a justification for raising the rent! For one or all of the above reasons, Dryvit Custom Brick is ideally suited to renovation. Have an old, infirm building? Want the old look restored? Need more curb appeal? Call Dryvit today.

Positive reinforcement: No doubt about it, traditional brick is hard - and even harder to repair. By adding or combining different weights of fiberglass reinforcing mesh, a Dryvit system can be over 7 times more impact resistant than a standard EIFS. The Custom Brick finish is extremely durable, with the added benefit of being relatively easy and inexpensive to repair if it is damaged.

INTERIOR

Be on the inside for a change: Dryvit is not just for exteriors. Custom Brick has been used in many interesting and exciting interior applications, applied directly over properly prepared drywall and other suitable substrates. Custom Brick can provide a warm, cozy interior look without reducing living space. Although most people may think of brick as strictly an exterior product, Dryvit Custom Brick is a perfect solution for interior applications that require warmth and distinction. Not only can Custom Brick be used to upgrade interior walls but it can do so in a variety of colors, textures and patterns. It is a product that can give an office building or a private residence a personality all its own. Dryvit Custom Brick is cost and space efficient and easy to install quickly over standard gypsum drywall or plaster.

And, of course, the virtually limitless design options add greatly to your opportunity to be creative. The range of interior uses for the product varies as dramatically as the finish options available. Backdrops, mantels, ceilings and interior replications of exterior architecture are but a few of the effects Custom Brick has successfully achieved. Your imagination and creativity can be the guide for success on your project. While Dryvit Custom Brick can give your interiors a refreshingly new appearance, you need to know that the insulation component of a Dryvit system cannot be used on the interior of any project.

TEMPLATES

Got Brick? Break With Tradition: Each region of the country has its preferred brick sizes, colors and shapes. This is because of the regional evolution of design trends, as well as the effect of local raw materials on the colors of the finished product. With Custom Brick, there are no such limits to what is readily available. Applicators have all the tools and skills needed to apply Custom Brick; and after a short instruction session, can perform the Custom Brick application.

All of our patterns were created for a specific application and are now part of our standard inventory of templates. Because Dryvit Custom Brick patterns can be created to match virtually any brick in size or shape, it can accommodate the architect's existing design for almost any project. Challenge us - if we don't have the design, color or texture you want, create one; and we will match it for you. That's why we call it Custom Brick. So, even if the building design is "complete", it may not be too late to contemplate the savings that Custom Brick can provide.

Information contained in this product sheet conforms to the standard detail recommendations and specifications for the installation of Dryvit products as of the date of publication of this document and is presented in good faith. Dryvit assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, contact Dryvit.

For more information on Dryvit or Continuous Insulation, [click here](#).

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DS227

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dryvit.com | 800.556.7752



3735 Green Rd. | Beachwood, OH 44122
800.321.7906 | tremcocpg.com



OUTSULATION® SOLUTIONS FROM DRYVIT





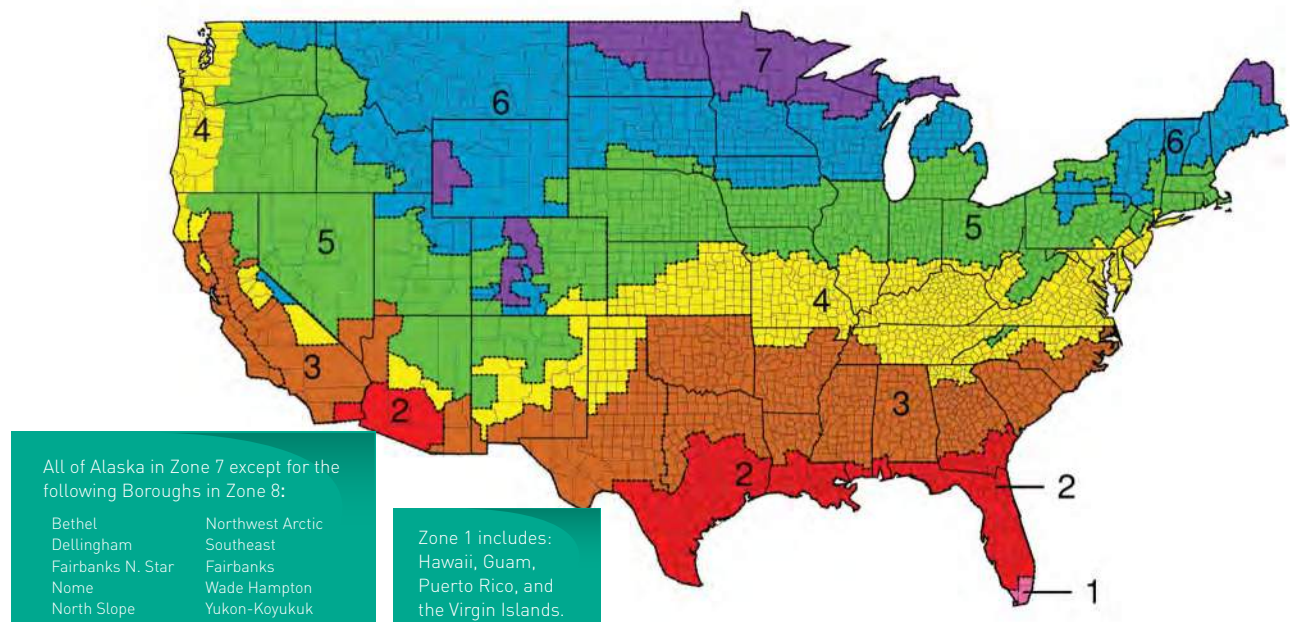
Liberty Center
Columbus, OH

WELCOME TO OUTSULATION, BY DRYVIT

As the name suggests, Outsulation systems place insulation on the outside of the building, and are the most effective solution for meeting today's energy code requirements for continuous insulation (CI).

But there is much more to Outsulation than CI alone. Outsulation systems deliver the latest in building science solutions for building envelopes, resulting in operational energy efficient, cost effective construction, low maintenance, low embodied energy building solution. Outsulation delivers:

- Engineered moisture drainage for incidental moisture
- Air & water resistive barrier membrane
- Anti-crack, impact resistant scrim
- High R-value with continuous insulation
- Durable and seamless finish veneer that provides a range of aesthetically appealing results



ENERGY CODES AND CI REQUIREMENTS

The Department of Energy (DOE) has mandated that all states comply with the ASHRAE 90.1-2010 design standard by September 26, 2016, which requires the use of continuous insulation (CI) on commercial buildings in over 90 percent of the United States. Other design standards and codes — such as ASHRAE 189.1, IECC 2012, IgCC 2012; Title 24, (Section 6) and CALGreen — will also require the use of CI, as well as air barriers, as they become adopted. The bottom line is that nearly all new commercial projects in the U.S. will soon require the use of an air barrier and CI as an integral part of exterior wall construction.

CI is much more efficient than the use of insulation in the wall cavity, and 2 inches of CI can have the effective R-value of 8 inches of cavity (batt type) insulation! As such, consider eliminating the use of cavity insulation altogether by using the right amount of CI to meet your total exterior wall insulation goals. An empty wall cavity improves airflow and reduces the dirt and moisture retention associated with batt insulation.

Rigid insulation, such as Expanded Polystyrene (EPS), can also be easily cut and shaped to provide dramatic architectural details and design effects, such as reveals, quoins, cornices and trim, that are much more difficult and expensive to achieve with heavier materials. Using an Outsulation system to combine the design flexibility and CI benefits of EPS is unique and extremely cost-effective.



Ronald McDonald House
Salt Lake City, UT



Sarkis & Siran Gabrellian
Child Care Learning
Center
Hackensack, NJ



HOW IT WORKS

Outsulation systems typically consist of the following components, as determined by code and performance requirements.

DRYVIT/TREMCO APPROVED WATER-RESISTIVE BARRIER:

Seamlessly protects sheathing or substrate from incidental moisture and eliminates air infiltration

- Liquid-applied
- Continuous or monolithic
- Includes Backstop NTX®, Backstop NTX-VB, Securock® ExoAir® 430, ExoAir® 230

CONTINUOUS INSULATION:

Absorbs expected building movement and enhances energy efficiency

- Eliminates thermal bridging in framed construction
- Meets CI requirements for all zones per ASHRAE 90.1-2010
- Available in both EPS (expanded polystyrene) and XPS (extruded polystyrene)
- Available in various thicknesses and can fully meet wall insulation requirements

DRYVIT/TREMCO APPROVED FLASHING SYSTEM:

Seamlessly protects openings in the building envelope from moisture

- Includes AquaFlash® or Dymonic® 100

ADHESIVE / DRAINAGE MEDIUM:

Vertical notches allow drainage of incidental moisture

- Adheres insulation board to the Air- and Water-Resistive Barrier

FINISH COAT:

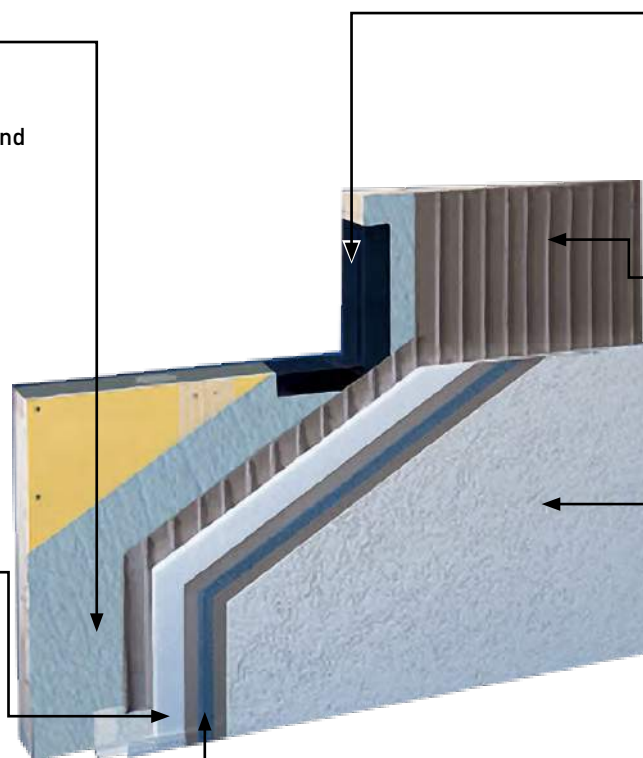
Blend of 100 percent acrylic copolymers, natural aggregates and UV resistant pigments

- Easy to maintain
- Available in many textures and limitless color options
- Offer multiple aesthetic options
- Options for increased hydrophobicity, flexibility and mildew and fade resistance

BASE COAT AND REINFORCING MESH:

Combine to provide the primary weather barrier and impact resistance

- Mesh embedded in base coat
- Various weights of mesh available, depending on impact resistance required



SYSTEM OPTIONS:

All Outsulation systems include adhesive, continuous insulation (CI), fiberglass mesh embedded in base coat, and finish, which are installed sequentially by a trained professional contractor as specified by the design team, and as required by code. Some Outsulation systems protect the underlying wall with an air- and water-resistive barrier under the CI, which maximizes the energy efficiency. Outsulation systems can be installed in either "barrier," "moisture drainage" or "pressure equalized" configurations, and these systems are engineered to perform in all climates and on all types of structures. On certain types of construction (high-rise) and in certain job conditions (cold weather), lift-in-place, prefabricated wall sections may provide certain benefits.

SUSTAINABLE SOLUTIONS:

Outsulation systems have been evaluated by the National Institute for Standards and Technology (NIST) and have less environmental impact than other common claddings. They can also contribute toward achieving LEED credits, depending upon project design and location.

Outsulation systems are more cost-effective throughout their lifecycle because the manufacturing process requires less energy than other common claddings, and the lightweight composition reduces fuel costs associated with transport. After application, Outsulation systems continue to keep heating and cooling costs low for the life of the building. Visit dryvit.com for more information.

OUTSULATION

- Intended for use in commercial construction or over masonry
- Insulation adhered directly to substrate
- Designed as a barrier system

OUTSULATION PLUS MD SYSTEM

- Qualifies for all construction types
- Incorporates a liquid-applied, air- and water-resistive barrier
- Vertical adhesive beads facilitate moisture drainage
- Corrugated strip or track is incorporated at the base of the wall
- Passive drainage

OUTSULATION MD SYSTEM

- Qualifies for all construction types
- Incorporates a liquid-applied, air- and water-resistive barrier
- Grooved insulation board facilitates moisture drainage
- Vent track and vent assembly are incorporated at the base of the wall
- Engineered drainage

OUTSULATION HDCI™

- Provides a 20-year warranty on puncture resistance
- Incorporates a liquid-applied, air- and water-resistive barrier
- Corrugated strip or track is incorporated at the base of the wall
- Qualifies for commercial construction
- Provides a 20-year warranty on puncture resistance
- Passive drainage

OUTSULATION X™ SYSTEM

- Features DOW® XENERGY™ Extruded Polystyrene (XPS) insulation board
- Incorporates a liquid-applied, air- and water-resistive barrier
- Vertical adhesive beads facilitate moisture drainage
- Drainage strip is incorporated at the base of the wall
- Qualifies for all construction types
- Supplemental fasteners required
- Passive drainage

OUTSULATION LCMD SYSTEM

- Qualifies for all construction types
- Mechanically fastened over sheet type water-resistive barriers (by others)
- Corrugated strip or track incorporated at the base of the wall
- Multiple drainage and attachment options available

OUTSULATION PE SYSTEM

- Qualifies for all construction types
- Incorporates a liquid-applied, air- and water-resistive barrier
- Closure blocks are configured to “compartmentalize” the wall for pressure equalization
- Vent track and vent assembly are incorporated at the base of the wall
- Engineered moisture drainage and pressure equalization

OUTSULATION RMD SYSTEM

- Intended for residential, wood framed (one and two family) construction
- Can incorporate a liquid applied air- and water-resistive barrier or sheet membrane and drainage mat
- Drainage strips or track incorporated at the base of the wall
- Multiple drainage and attachment options available

OUTSULATION SYSTEMS WITH SE430

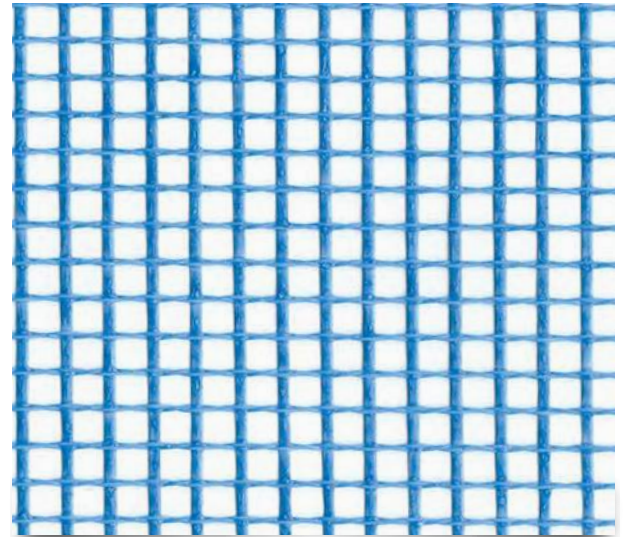
- Outsulation MD Securock ExoAir 430
- Outsulation Plus MD Securock ExoAir 430
- Outsulation HDCI Securock ExoAir 430
- Outsulation PE Securock ExoAir 430
- Outsulation X Securock ExoAir 430

DURABILITY

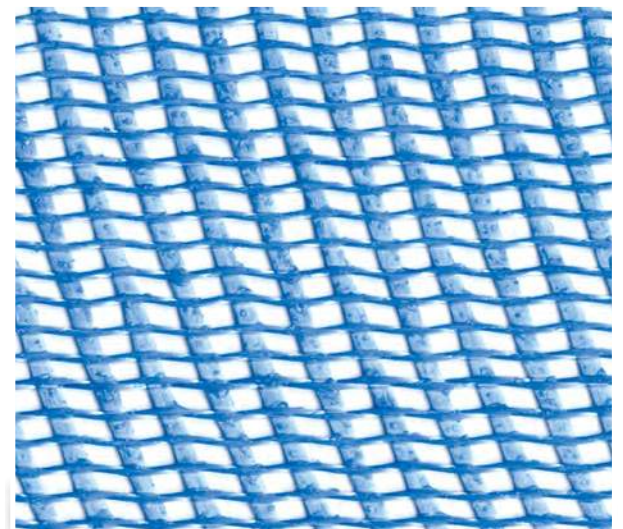
All Outsulation systems incorporate alkali and fire-resistant fiberglass mesh that is embedded into the base coat over the entire surface of the insulation board

This combination provides the primary weather barrier, as well as tensile strength and impact resistance for the system, and these factors all play a critical role in protecting the physical integrity and beauty of the building exterior. The mesh is available in several weights and is specified according to the anticipated level of exposure to potentially damaging impact.

The heaviest and strongest — Panzer 20 Mesh — is intended for use at all ground floor locations and high-traffic areas such as balconies. Hurricane-prone regions may have building codes that require assemblies reinforced with Panzer Mesh. Panzer 20 is also the required mesh in Dryvit's Outsulation HDCI system, which comes with a 20-year puncture resistance warranty. Consult Dryvit's Engineering Department or your local Dryvit representative for more information on these circumstances.



Standard™ Mesh



*Panzer® 20 Mesh
Provides 10 times (1000%)
better impact resistance
than Standard™ Mesh*

DRYVIT REINFORCING MESH OPTIONS:

Standard™ Mesh: Recommended for normal-wear applications on the second story and above

Corner Mesh: Used to reinforce corners and recommended on all ground-floor applications

Intermediate™ Mesh: Recommended for medium-level traffic and impact requirements on the second story and above

Panzer® 20 Mesh: Recommended for all high-traffic areas

AESTHETICS

The perfect solutions for any design.

Dryvit Outsulation systems offer unlimited design flexibility to suit any architectural style, and are available with a wide range of finishes that can be customized to meet virtually any color or texture desired.

The ability to easily create a vast array of architectural designs using decorative shapes and reveals is one of the hallmarks of an Outsulation system.

VENEERS



Seamless Stone



Traditional Plaster Renders



Old World or "Aged" Plaster



Metal Panel Effects



Limestone



Brick



Bellagio
Las Vegas, NV



The Stratford
Cincinnati, OH

FINISHES

Brick Veneer

Like the traditional look and feel of brick? No problem. Dryvit provides the look and feel of brick combined with all the benefits of continuous insulation that results in a highly energy efficient brick wall.

Dryvit provides the latest in brick wall technology that includes a water management system and a high R-value through the use of CI that meets the latest building code. All backed by a single source warranty that covers the entire assembly from the air/water-resistive barrier to final brick veneer.

Options:

- NewBrick® is a lightweight insulated brick that matches the size, appearance and texture of claybricks while reducing the overall wall cost and accelerating the dry-in process
- Custom Brick is a templated acrylic finish that creates a realistic brick masonry finish



Office Building
Schenectady, NY

AVAILABLE IN UNLIMITED COLORS, TEXTURES AND PATTERNS

Some examples include but are not limited to:



Corinth



Georgetown



Littleton



Rockland



Used Wall Brick



Brooklyn Brick



Utility Brick



PERFORMANCE ENHANCEMENTS

HIGH STYLE MEETS HIGH PERFORMANCE

All Dryvit finishes are formulated with superior quality raw materials and have been thoroughly tested to perform in a wide range of expected conditions, but options exist to further enhance performance in particularly harsh or challenging environments.



THESE INCLUDE:

Fade resistance: High-performance pigments are used to formulate vivid colors that would otherwise be prone to rapid

UV breakdown. This state-of-the-art technology is also VOC and APEO free. Refer to DS269.

Elasticity: Special elastomeric and proprietary “V Rock” technology is used to provide increased flexibility, which performs exceptionally well when used in finishes applied directly to stucco or other rigid surfaces. Refer to DS249.

Hydrophobicity: Advanced water-repellent technology minimizes dirt accumulation and helps keep the wall looking like new. Refer to DS267.

Mildew resistance: Dryvit’s “PMR” technology utilizes advanced biocides for use in damp or shady environments where algae or mildew growth is likely. Refer to DS223.



Shopping Center
Phoenix, AZ



PERFORMANCE ENHANCEMENTS

MULTIPLE BENEFITS OF USING OUTSULATION SYSTEMS

Using Outsulation Systems can reduce material use, shorten construction time, and lower building operating costs, and architects, contractors and building owners enjoy these measurable benefits every day. Fred Quinn of Quinn & Associates is one such architect. He chose the Outsulation Plus MD system for the Metro Career Academy in Oklahoma City, and exceeded the expectations of the project stakeholders by using the energy efficient, design-flexible, single-source cladding.

Brick is so common in Oklahoma City that a section of the city is actually nicknamed “Bricktown,” so it was logical that the original design of the Metro Career Academy building specified 24,000 square feet of clay brick and 13,000 square feet of cast stone. Knowing the high price for both these materials and their installation, Quinn was open to considering a more cost-effective and sustainable solution, as long as his aesthetic intent could be maintained. Dryvit’s Outsulation Plus MD System with Custom Brick™ and Limestone™ finish fully met both objectives.



Find out more and watch a video case study

Architect:
Quinn & Associates
Oklahoma City, OK

General Contractor:
CMS Willowbrook
Oklahoma City, OK

Dryvit Applicator:
DMG Masonry
Arlington, TX



PROJECT HIGHLIGHTS

MATERIAL SAVINGS

Outsulation Plus MD (using 4 inches of EPS) allowed the construction team to achieve the performance R-values required of the exterior wall, and eliminate the use of cavity insulation entirely. Substituting the 1.5-pound per square foot Outsulation Plus MD system for the 40-plus pounds per square foot masonry reduced the amount of concrete and structural steel needed to support the weight of the wall, and overall, 1.4 million pounds of materials — 96 percent of the original cladding weight — were eliminated from use!

LABOR SAVINGS

All components of the Outsulation Plus MD System were installed by a single trained subcontractor, simplifying the construction schedule.

CONSTRUCTION TIME SAVINGS

Using less structural material and a single contractor for the Outsulation Plus MD system reduced overall construction time by 15 weeks, which saved money and enabled the owner to move into his building ahead of schedule.

SINGLE WARRANTY

Outsulation systems are engineered, tested and fully-warranted by Dryvit, whereas a brick wall is composed of a variety of materials supplied by different manufacturers.

LEED CERTIFICATION

The Outsulation Plus MD system contributed to earning maximum EA category credits and LEED Gold certification.

ENERGY SAVINGS

Measured against the modeled performance of an identical structure built to meet local building and energy codes, this building was predicted to have an energy savings of 34.8 percent and an energy cost reduction of 42.8 percent annually. After one full year, the actual energy cost reduction was 52.6 percent — more than the modeled expectation!

By choosing Dryvit's Outsulation Plus MD system, the design and construction team were able to meet the owner's aesthetic and performance goals ahead of time, and under budget. With numerous challenges to overcome and ambitious goals to meet, Outsulation by Dryvit delivered measurable results above and beyond expectation, and will continue to do so for the lifetime of the building.



Building Energy Codes Are Changing

The international movement to improve energy performance and lower environmental impact is dramatically affecting the way buildings must be designed and built, particularly with the requirements for air barriers and continuous insulation. Outsulation by Dryvit is a tested and proven solution to this challenge.

Best of all, with Outsulation systems, performance and aesthetics aren't mutually exclusive. The wide variety of nishes, textures and colors can make nearly any architectural vision a reality.

The benefits of Outsulation have been realized in hundreds of thousands of projects around the world, and the systems provide a single-source, seamless and sustainable cladding solution for buildings of any shape, size and type.

Simply put, Outsulation systems provide everything you need from a building code perspective, and everything you want from a performance and aesthetic standpoint.

Visit dryvit.com or call 800-556-7752 to learn more about Outsulation by Dryvit.

Tremco Construction Products Group brings together the Commercial Sealants & Waterproofing and Roofing & Building Maintenance divisions of Tremco CPG Inc.; Nudura Inc.; Prebuck LLC; Willseal; Weatherproofing Technologies, Inc.; Weatherproofing Technologies Canada, Inc.; Pure Air Control Services, Inc.; and Tremco Barrier Solutions, Inc.



Outsulation®, Backstop NTX®, Aquaflesh®, Panzer® NewBrick®, Quartzputz®, Freestyle®, and Sandblast® are registered trademarks of Dryvit Systems, Inc. Dymonic® and ExoAir® are registered trademarks of Tremco Incorporated. Securock® is a trademark of USG Corporation and its affiliates. Use of the ® symbol indicates registration with the US Patent & Trademark Office and the Canadian Intellectual Property Office.

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DS266



Construction Products Group

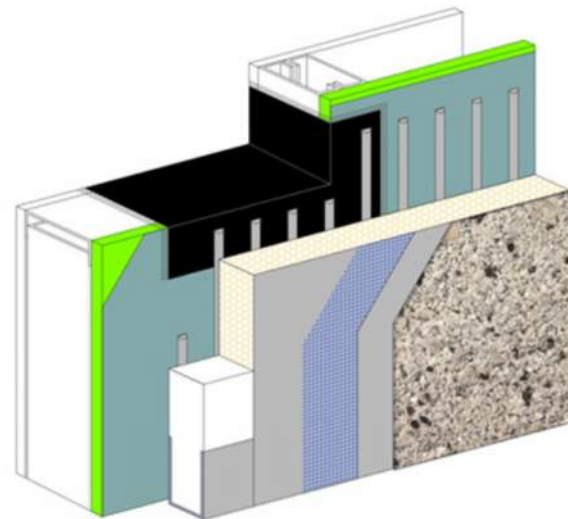
3735 Green Rd. | Beachwood, OH 44122
800.321.7906 | tremcocpg.com

OUTSULATION® PLUS MD

An exterior wall insulation and finish system with moisture drainage that incorporates continuous insulation and an air/water-resistive barrier

Summary

Dryvit® offers a family of performance-based systems that allows architects and owners to meet the specific demands of today's energy codes, such as continuous insulation and an air/water-resistive DS445 barrier. Dryvit's original Outsulation® System has been installed on over 500,000 buildings worldwide. Due to the increased demands for a wall system to be able to drain away incidental moisture, the Outsulation concept has grown into a family of related systems, each building upon the other to achieve specific performance goals.



Efficient and Economical

Outsulation Plus MD expands upon the proven weatherability and insulating qualities of Outsulation by adding a second line of defense against air, moisture and weather. This is accomplished with a coating of a Dryvit/Tremco® approved air/water resistive barrier and accessories at all sills of openings. Outsulation Plus MD goes one step further through the use of adhesive channels to provide moisture drainage. These channels work in tandem with either of two system termination options, resulting in an efficient and economical system that is easy to install.

Features

- | | |
|--|--------------------------------|
| • Moisture Drainage | • Air/Water-Resistive Barrier |
| • High-Performance Exterior Insulation | • Waterproof Flashing Material |
| • Reinforced Base Coat | • Warranty |
| • Drainage Track | |



System Components

1. Air/Water-Resistive Barrier: Backstop® NT™ Water-Resistive Membrane and Air Barrier (available in Texture, Smooth or Spray), Backstop NT-VB or ExoAir® 230 Synthetic Air & Vapor Permeable Membrane
2. Dryvit Grid Tape™
3. Dryvit AquaFlash® System, Flashing Tape™ and Surface Conditioner™, Dymonic® 100 or Backstop Flash & Fill™
4. Dryvit Drainage Track™, Dryvit Drainage Strip™ adhered with Dryvit AP Adhesive® or Pre-Based Starter Board (shown)
5. Dryvit Adhesive in vertical notched trowel configuration
6. EPS Insulation Boards, creating a layer of continuous insulation
7. Dryvit Reinforced Base Coat
8. Dryvit Finish



Why Tremco Construction Products Group?

When we say Tremco Construction Products Group (CPG) companies provide envelope solutions for all sides of the building, that means comprehensive product systems that make it faster to build or restore, simpler to maintain, and that extend the building's useable life.

Together, solutions from Tremco CPG companies empower your team to bring their vision to life, whether it's new construction, renovations or restoration — to improve weathertightness and energy efficiency, give a brand new look to an aging structure, or complete a historical preservation.

Dryvit...Proven for Over 50 Years

Dryvit Systems, Inc. is an ISO 9001:2015 and ISO 14001:2015 certified company. ISO standards have been established worldwide as a common denominator for product excellence. Dryvit is the recognized leader in construction technology. With leadership comes an obligation and commitment to research and development. The Outsulation Plus MD System is an example of our determination to continuously evaluate market demands and develop new and exciting products.

One Stop for Your Next Project's Building Envelope

Imagine the convenience of one source for information and assistance on building envelope components. One source for all the project-specific, custom details with solutions that are tested, proven and warranted together. A Tremco Construction Products Group building envelope is designed and tested to work as one continuous system and is warranted together in a single document.

Dryvit Systems, Inc. | One Energy Way | West Warwick, RI 02893 | 401.822.4100 | dryvit.com

Tremco Construction Products Group (CPG) brings together Tremco Incorporated's Commercial Sealants & Waterproofing and Roofing & Building Maintenance operating divisions; Dryvit Systems, Inc.; Nudura Inc.; Willseal; Weatherproofing Technologies, Inc. and Weatherproofing Technologies Canada, Inc.

Dryvit®, Outsulation®, Backstop®, AquaFlash® and Dryvit AP Adhesive® are registered trademarks of Dryvit Systems, Inc. Tremco®, ExoAir® and Dymonic® are registered trademarks of Tremco Incorporated. Use of the ® symbol indicates registration with the US Patent & Trademark Office and the Canadian Intellectual Property Office.

DS929



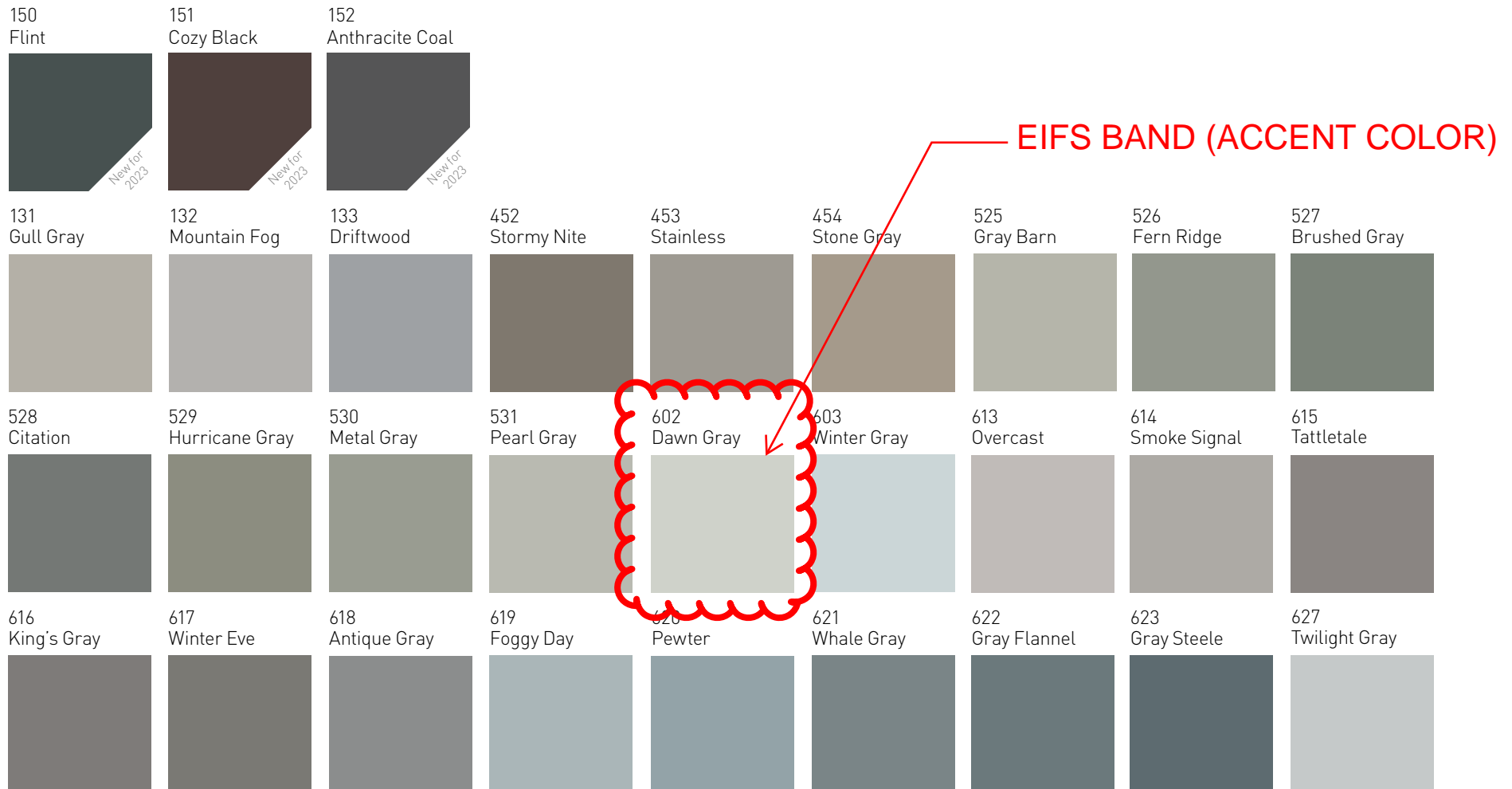
Construction Products Group

tremcocpg.com



📈 Colors marked with this symbol are designated as Hi Tint and require an additional charge. Contact your local distributor or sales representative for more information.

Blacks & Grays



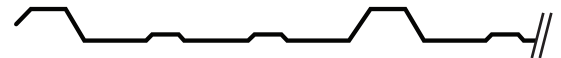


R-Loc

Commonly referred to as PBR-panel, this 26-gauge commercial panel is an outstanding choice for any project that requires commercial-grade performance. R-Loc is designed to maximize the potential of your structure, specifically the steel frame.

With the added purlin bearing leg, R-Loc provides easier installation and a more pleasing appearance.

- Industry standard configuration allows maximum purlin spacing for a cost-effective building.
- Ideal for low-pitch commercial roofs.
- Matching trims and accessories are available.



RECOMMENDED 1½:12 PITCH AND ABOVE	26 GAUGE	36" OVERALL COVERAGE	1¼" MAXIMUM RIB HEIGHT
---	--------------------	-----------------------------------	-------------------------------------

Choose CentralGuard[®] for the best protection and a lifetime warranty.

CentralGuard is our specific combination of everything that goes into making the highest-quality metal panels. Available on our Prime panels, the CentralGuard name is a guarantee that you have the best protection and a lifetime paint warranty.

Choose CentralGuard for the perfect balance of fade protection, rust blocking, and dent resistance.

	PRIME CentralGuard
FADE PROTECTION	
Paint Warranty	LIFETIME
Paint Thickness	THICK 1.0 mil
Fade Warranty	30-YEAR
Fade Protection	✓✓
RUST BLOCKING	
Advanced Rust Blocking	✓✓
Perforation Warranty	20-YEAR
Substrate Thickness	1.60 mil
DENT RESISTANCE	
Advanced Dent Resistance	✓✓
Steel Thickness	THICK
Steel Gauge	26 ga.
INSTALLATION	
Purlin Bearing Leg	✓✓



MINIMUM SPECIFICATIONS FOR PRIME PAINTED PANELS

- GAUGE**
26 ga. | 24 ga.*
- STEEL THICKNESS**
26 ga. 0.0185" | 24 ga. 0.023"
- PAINT THICKNESS**
Top coat paint: .70 mil
Top coat primer: .30 mil
Bottom coat backer: .35 mil
Bottom coat primer: .35 mil
- TOTAL THICKNESS**
26 ga. 0.0202" | 24 ga. 0.0247"
- RUST PROTECTANT SUBSTRATE**
Galvalume[®] AZ50
- STEEL STRENGTH**
80,000 PSI (26 ga.) | 50,000 PSI (24 ga.)
- PAINT SYSTEM**
SMP
- WARRANTY**
Lifetime limited paint adhesion
30-yr. chalk and fade
20-yr. Galvalume perforation

TESTING & APPROVALS

- TESTING**
 - AISI S907 Diaphragm Shear Cantilever Test, 26 ga.
 - ASTM-E455 Diaphragm Shear Standard Test, 26 ga.
 - ASTM-E1592 Structural Test for Roof Systems Over Open Purlin, 26 ga.
 - ASTM-E1592 Structural Test for Roof Systems Over Solid Decking, 26 ga.
 - ASTM-E1646 Water Leakage Test of Exterior Metal Roof Panel, 26 ga.
 - FM4471 Foot Traffic Resistance Test, 26 ga.
- APPROVALS**
 - UL2218 UL Approval, Impact Resistance, Class 4
 - UL580 UL Approval, Uplift Resistance, Class 90
 - UL790 UL Approval, Fire Resistance, Class A
 - RC-424 Texas Windstorm Approval, 26 ga. min. Over Steel Purlins
 - RC-576 Texas Windstorm Approval, 26 ga. min. Over Plywood Deck, OSB Deck, or Wood Purlins
 - FL14024.1 Florida Approval, Wall Panel 26 ga. min. Over Steel Purlins (NON-HVHZ)
 - FL14016.3 Florida Approval, Roof Panel 26 ga. min. Over Steel Purlins (NON-HVHZ)
 - FL14026.5 Florida Approval, Roof Panel 26 ga. min. Over 1½" Plywood (NON-HVHZ)

* 24 ga. available in Polar and Galvalume, acrylic-coated bare in select plants



Choose CentralGuard for the best protection and a lifetime warranty.

26 GAUGE SMP FINISH

Commercial Colors

R-Loc™

M-Loc™

7.2



*Contact your salesperson for accurate pricing. † Color variation between orders is normal and not cause for rejection. ‡ Weathering and appearance variation, including color, sheen, and spangle, is common in non-painted materials and is not a cause for rejection. For consistent appearance, choose a paint-finished product. Colors on this chart are close representations of actual metal color, limited by printing and viewing conditions. Color matching optimized for outdoor viewing.

SHERWIN-WILLIAMS.
Coil Coatings



PREMIUM COLOR

Fluoropon® 70% PVDF
20-year Warranty

Copper Metallic*†
PRIME

Clear acrylic coating

Galvalume®‡



Choose CentralGuard® for the best protection and a lifetime warranty.

CentralGuard is our specific combination of everything that goes into making the highest-quality metal panels. Available on our Prime panels, the CentralGuard name guarantees that you have the best protection and a lifetime paint warranty.

Choose Prime for the perfect balance of fade protection, rust blocking, and dent resistance. Upgrade to Ultra for projects that demand the ultimate dent resistance.



R-Loc™



M-Loc™



FADE PROTECTION

Paint Warranty
Paint Thickness
Fade Warranty
Fade Protection

RUST BLOCKING

Advanced Rust Blocking
Perforation Warranty
Substrate Thickness

DENT RESISTANCE

Advanced Dent Resistance
Steel Thickness
Steel Gauge

INSTALLATION

Purlin Bearing Leg

COLOR AVAILABILITY

R-Loc

M-Loc

7.2 - 36" coverage

7.2 - 28.8" coverage

PRIME CentralGuard

LIFETIME
THICKER 1.0 mil
30-YEAR
✓

ULTRA CentralGuard

LIFETIME
THICKER 1.0 mil
30-YEAR
✓

✓

20-YEAR
1.60 mil

✓✓

THICK
26 ga.

✓

All colors

All colors

Brilliant,
Burnished Slate,
Charcoal, Galvalume,
Gray, Light Stone

All colors

✓

20-YEAR
1.60 mil

✓✓

THICKEST
24 ga.

✓

Burnished Slate,
Charcoal, Galvalume,
Gray, Light Stone, Polar

Galvalume,
Light Stone,
Polar

Galvalume

—

7.2 (36" Coverage)



7.2 (28.8" Coverage)





NatureScreen is the strongest, most durable, innovative trellis system available today. We offer a variety of styles including the standard Double Mesh Trellis (DMT), a Graphic Mesh Trellis (GMT), and our newest and most economical Single Mesh Trellis (SMT/SMT E) system. All of our trellis systems can include our optional lighting packages for 24/7 enjoyment of your plant screens.



FEATURES & BENEFITS

◆ Available in three distinct styles:

Double Mesh Trellis - **DMT**

Graphic Mesh Trellis - **GMT**

Single Mesh Trellis - **SMT/SMT E**

◆ **Extruded Aluminum Frames** provide a strong foundation for plants to thrive.

◆ Industry leading **10ga, 8ga or 6ga Wire Mesh is 50% - 125% thicker** for added strength.

◆ **Complete Project Management** from Concept to Installation

◆ **Manufactured In-House** in our state-of-the-art Central Ohio facility

◆ **Nationwide Turnkey Installation**

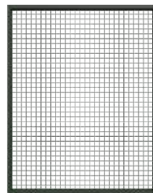
FEATURES & BENEFITS

◆ **Stainless Steel Mesh** for elegance beyond the ordinary

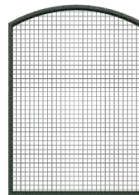
◆ **Integrated LED Lighting Packages** for 24/7 enjoyment

◆ **Integrated Plant Mister Systems**

SHAPES



SQUARE/RECTANGLE



ARCHED TOP



CUTOUTS



GEOMETRICS



ARBORS

MOUNTING



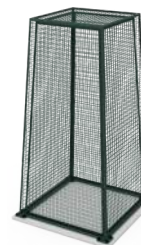
WALL MOUNTED



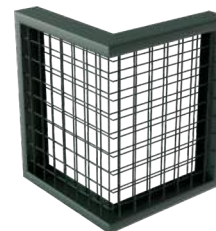
BETWEEN POSTS
& FENCE LINES



INTEGRATED
PLANX PLANTERS



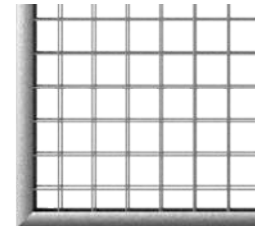
FREESTANDING
CUSTOM SHAPES



CORNER SYSTEMS

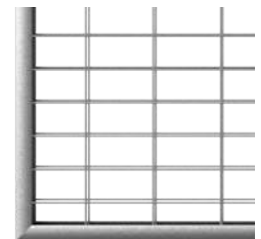
WIRE MESH

2X2

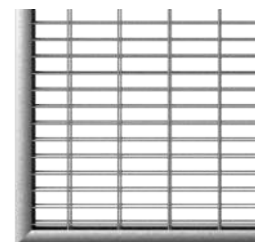


STANDARD MESH

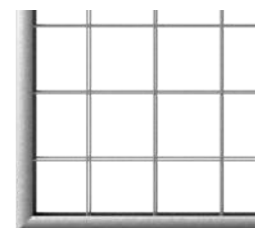
2X4



1X3



4X4



CUSTOM MESH

TRELLIS SYSTEM OPTIONS

naturescreen® DMT



NatureScreen Double Mesh Trellis (DMT) sets the standard for an attractive, versatile, durable trellis system. DMT systems have been integrated into a variety of installations including parking garages, freestanding feature wall and numerous wall mount projects throughout the country.

naturescreen® GMT



Our innovative Graphic Mesh Trellis (GMT) System brings your NatureScreen to life from the day it's installed! Plant graphics provide year round greenery in those seasonal environments. Choose from our selection of graphics or design your own lifestyle background. Optional lighting packages are also available for 24/7 enjoyment.

naturescreen® SMT/SMT E



SMT - The new Single Mesh Trellis (SMT) systems bring a contemporary, modern appearance to your projects looking for a minimalistic design element. Our single layer 6ga (.192") wire mesh captured in a heavy walled extruded aluminum frame will give even the hardiest of climbing vines the support they need to thrive.

SMT E - The new Single Mesh Trellis E (SMT E) system provides the same properties of the SMT above in an economical 8Ga (.162) wire mesh for a cost saving price point advantage.



Common Color Options

NatureScreen is most often ordered in one of the six colors below. Want something unique? Provide a sample, RAL or PMS number and we will color match to your specifications.



WHITE SATIN



BLACK
TEXTURED



CITY GREEN
TEXTURED



CITY BROWN
TEXTURED



SILVER SATIN



NIGHTHAWK
TEXTURED



*Please provide Sherwin-Williams,
Benjamin Moore, PPG, RAL or PMS
for custom color matching.*



Custom Graphics

Keep your space looking green – even out of season – or create a custom marketing message on one side while your plants grow on the other. Provide us with your artwork or let our Graphics Team assist you.



NATURESCREEN® LIGHTING OPTIONS

Very few architectural features enhance building components as much as strategically placed lighting. That's why we have designed all of our trellis systems with lighting in mind. You can choose from energy efficient integrated LEDs or clever cantilevered lights to add that final perfect highlight to your projects.

Integrated LEDs

Add that final touch to our trellis systems with long-lasting and energy-efficient LED lighting. Our LED lighting is thoughtfully integrated into the trellis systems, providing highly attractive side/down lighting that will hold up to the elements.



Cantilevered Lights

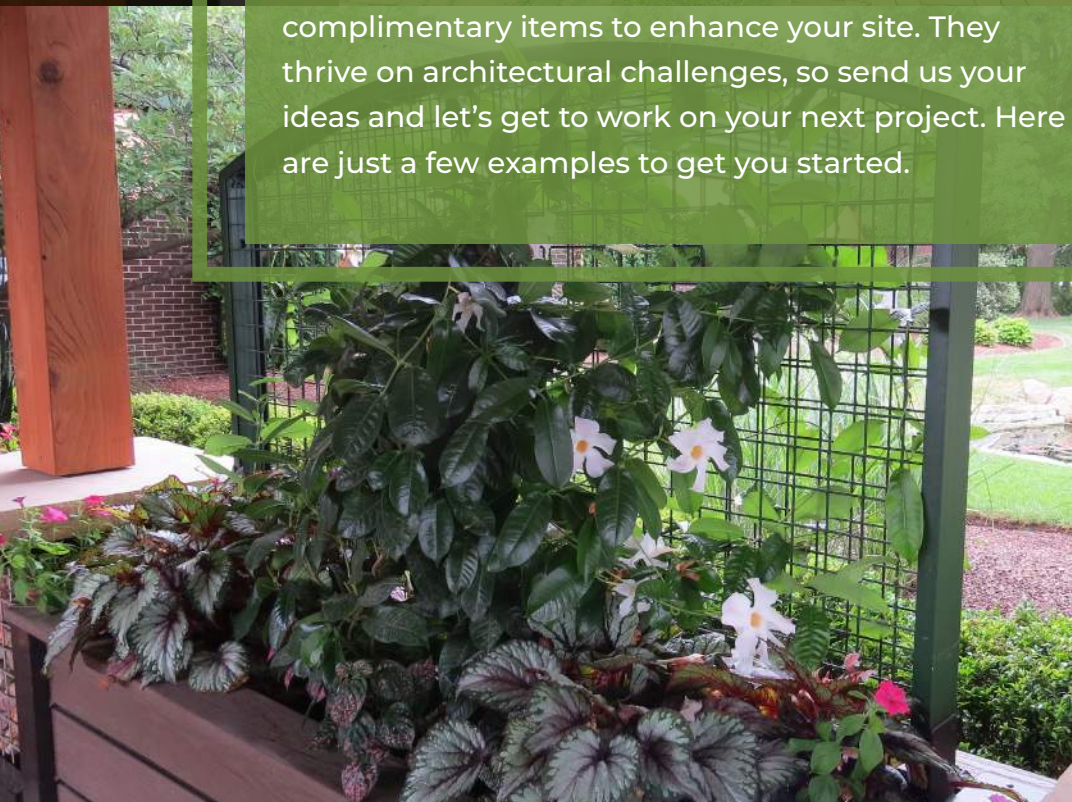
Visual interest can be achieved with the use of cantilevered lights. Lights can be wall mounted above the trellis or integrated into each unit, with numerous styles to choose from. Our favorite is the timeless look of the integrated goose-neck or barn light.





ENHANCEMENTS

The R&D Team at CityScapes is continually innovating complimentary items to enhance your site. They thrive on architectural challenges, so send us your ideas and let's get to work on your next project. Here are just a few examples to get you started.





POST SURROUNDS

We developed an easy to install Post Surround or Column Wrap system that adds visual interest to existing posts or columns. Utilizing our heaviest weight, stainless steel mesh with a proprietary two-piece top and bottom retainer, the surrounds can be installed quickly with minimal tools. Fill the mesh with river rock or stones to enhance an entry way, lobby or sign post.

COVRIT® WALLS

Our trellis systems can be integrated into our popular Covrit wall Systems. Create a beautiful alternative to traditional fencing with a series of post mounted trellises or add a unique look by alternating trellis sections with our Plankwall product line. For more information about our Covrit Wall Systems, visit our [Covrit Walls & Gates page](#).



PLANX® PLANTERS

Our DMT and SMT/SMT E Trellises are the perfect complement to our Planx Planter product line. These unparalleled raised planters are designed with style, versatility and zero maintenance in mind. They are even backed by an industry-leading 20-year warranty. They make the perfect addition to walkways, building entryways, rooftop gardens and restaurant patios.

CityScapes®

ARCHITECTURAL INNOVATIONS

Since 1997, we've been committed to providing our customers with superior products for their architectural projects while continuing to innovate with their needs in mind.

We design, develop and manufacture elegant, code-compliant architectural products that enhance the appearance of any project. All CityScapes products are made in the U.S.A. using professional-grade material and a highly skilled workforce.

TURN-KEY SERVICES

- IN-HOUSE DESIGN
- SINGLE POINT OF CONTACT
- STATE-OF-THE-ART MANUFACTURING FACILITY
- NATIONWIDE INSTALLATION

Contact our customer service representatives for more information at (877) 727-3367 or contact@cityscapesinc.com

Envisor® | Covrit® | ToughGate™ | NatureScreen® | Planx® Planters



ALPHA[®] SERIES | U PANEL CONSTRUCTION



ALPHA ALL WELDED ALL STEEL
DELIVERING WHAT YOU WANT MOST-
MEASURABLE HIGH PERFORMANCE AND
UNMATCHED DURABILITY - AT A COST THAT
MAKES SENSE.

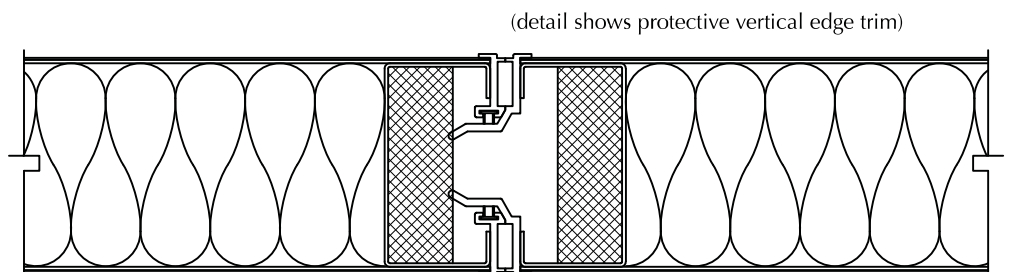
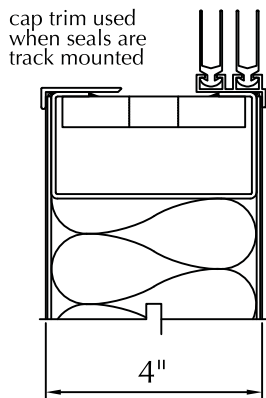
- **SUPERIOR PERFORMANCE**
 Guaranteed field-tested sound control.
 Guaranteed operating force.
- **UNMATCHED DURABILITY**
 Unitized one piece all steel, robotically welded.
 20-year limited warranty.
- **COMPETITIVE COST**
 Ask us for budget pricing for a variety of useful
 options and finishes.
- **PROTECTIVE EDGE TRIM**
 Saves the otherwise vulnerable exposed finish on
 corners of "wrap around" or "trimless" design.
 Trimless design available as an extra-cost option.

MANUAL OR ELECTRIC OPERATION.

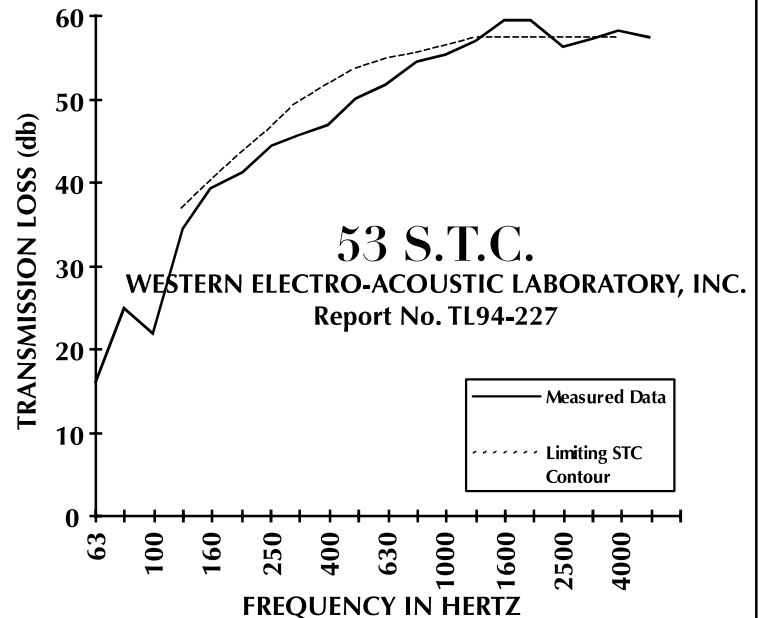
PANEL HEIGHT: 60' max.

**PANEL WIDTH: 60" max. but do not exceed width
 of finish fabric.**

PANEL WEIGHT: 9.2 pounds per square foot.



40 N.I.C.
GUARANTEED WHEN SPECIFIED
TESTED IN ACCORDANCE WITH ASTM E336



SPECIFICATIONS

PANEL CONSTRUCTION: Acoustical panel, approximately 4" thick, incombustible, with 14 gauge steel faces fusion welded 8" o.c. (max.) to 14 gauge steel channel perimeter frame with 14 gauge top rail. Panel faces internally stiffened by welded steel members. Core shall be fibrous glass sound attenuating material. Panel weight shall be approx. 9.2 psf (45 kg/m²). Panel perimeter trim of approx. 1/8" thick aluminum alloy shall incorporate protective edge feature and form tongue and groove vertical intersections having multi-fin acoustical gaskets. Optional trim allowing finish to wrap around vertical edge. Panels shall be one piece; field joints not permitted. No fasteners shall be visible on panel face when wall is in extended position.

TEST DATA: Sound transmission class (S.T.C.) 53 when tested in accordance with ASTM E90-85 in NVLAP independent laboratory. Trolley plate anchorage in panel top rail withstands a 10,000-pound minimum tensile load applied via pendant bolt. When tested in accordance with ASTM E-72, a 23'x4' panel resists a uniform load of 20 pounds per square foot applied normal to the panel face without damage.

Sliding Acoustical Stage Door

General Notes:

Panel..... Alpha Series - "U" Panel Construction
Construction and Sound Rating 53 S.T.C.-Incombustible - 4" Thick Steel Panels
14 gauge sheet steel panel faces fusion welded to 14 gauge steel channel frame with 14 gauge top channel. Inner core of panel to be filled with fiberglass insulation.

Aluminum..... Aluminum to be 6063-T5 and 6063-T6 alloy
Track Finish..... JET-COTE A36 FINISH SHEET STEEL (GREY)
Panel Trim Finish..... CLEAR SATIN ANODIZED ALUMINUM FINISH
Hardware..... Exposed hardware: Powder coated to match aluminum extrusions
Concealed hardware: One coat shop prime
Flush pulls: Powder coated to match aluminum extrusions

Wall Covering Information: PAINT TO MATCH ASCENT BLDG COLOR

**** Prime Painted Panel Faces.**
(Grey metalized primer with rust inhibitors.)
NOTE: If final finish is to be Paint, use only Satin or Flat finish paint.
Do not use "Gloss" or "Semi-gloss" paints.

Operable Wall Information:

Architect: If the partition presented in the following sheets is supported by an overhead structure, please indicate the live load deflection anticipated at mid-span of beam due to partition weight.

Approximate weight of panels is _____ per square foot.

Approximate weight of track is _____ per lineal foot.

Anticipated deflection: _____ Indicate: _____

Contractor: Floor under partition in extended or stacked position to be level $\pm 1/8"$. The "Hanger rod spacing templates" indicate location of track support required for operable wall. Beam drilling (by others) should conform to the templates and to related sections.

Project Information:

Distributor: Advanced Equipment Corporation Manufacturer: Advanced Equipment Corporation

Operable wall type: 2 E E 8B 1 U 1 9 P.O.#/Contract#: Letter of Intent

SHEET 1 OF 25

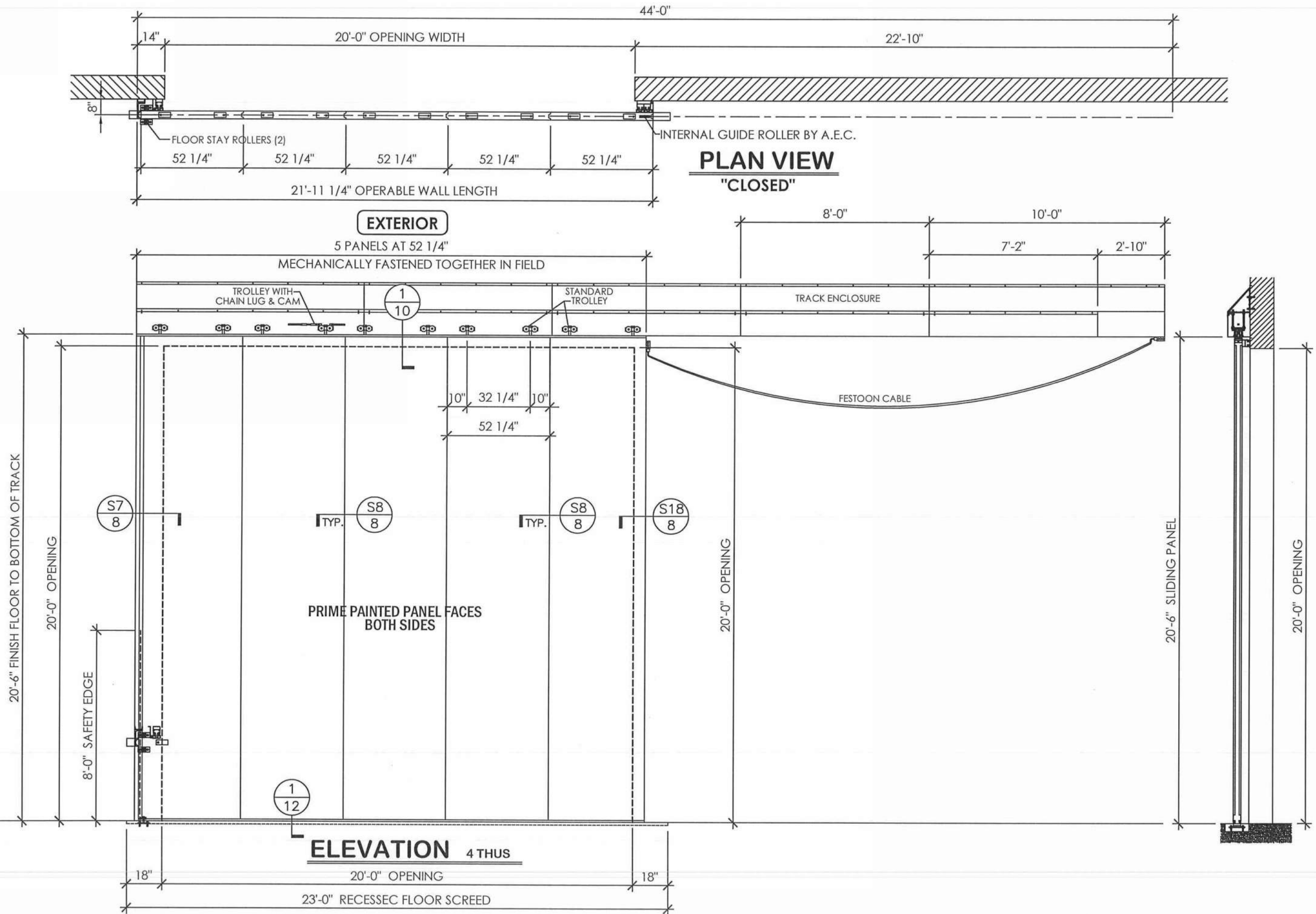
13570
JOB NUMBER

ENGINEERING
BY: BOB DATE: 11/8/21
REV: DATE:
REV: DATE:

2401 West Commonwealth Ave
Fullerton, CA 92833
Tel: (714) 635-5350 Fax: (714) 525-6083

advanced
equipment
CORPORATION







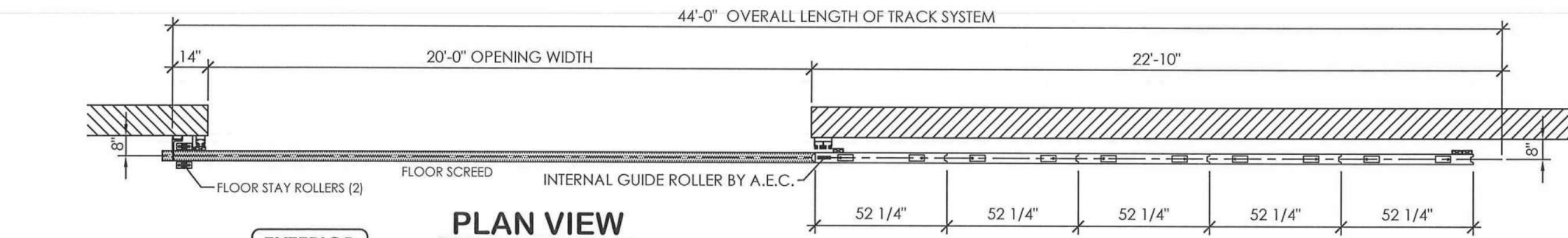
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CORPORATION

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ENGINEERING
BY: BOB
DATE: 11/8/21

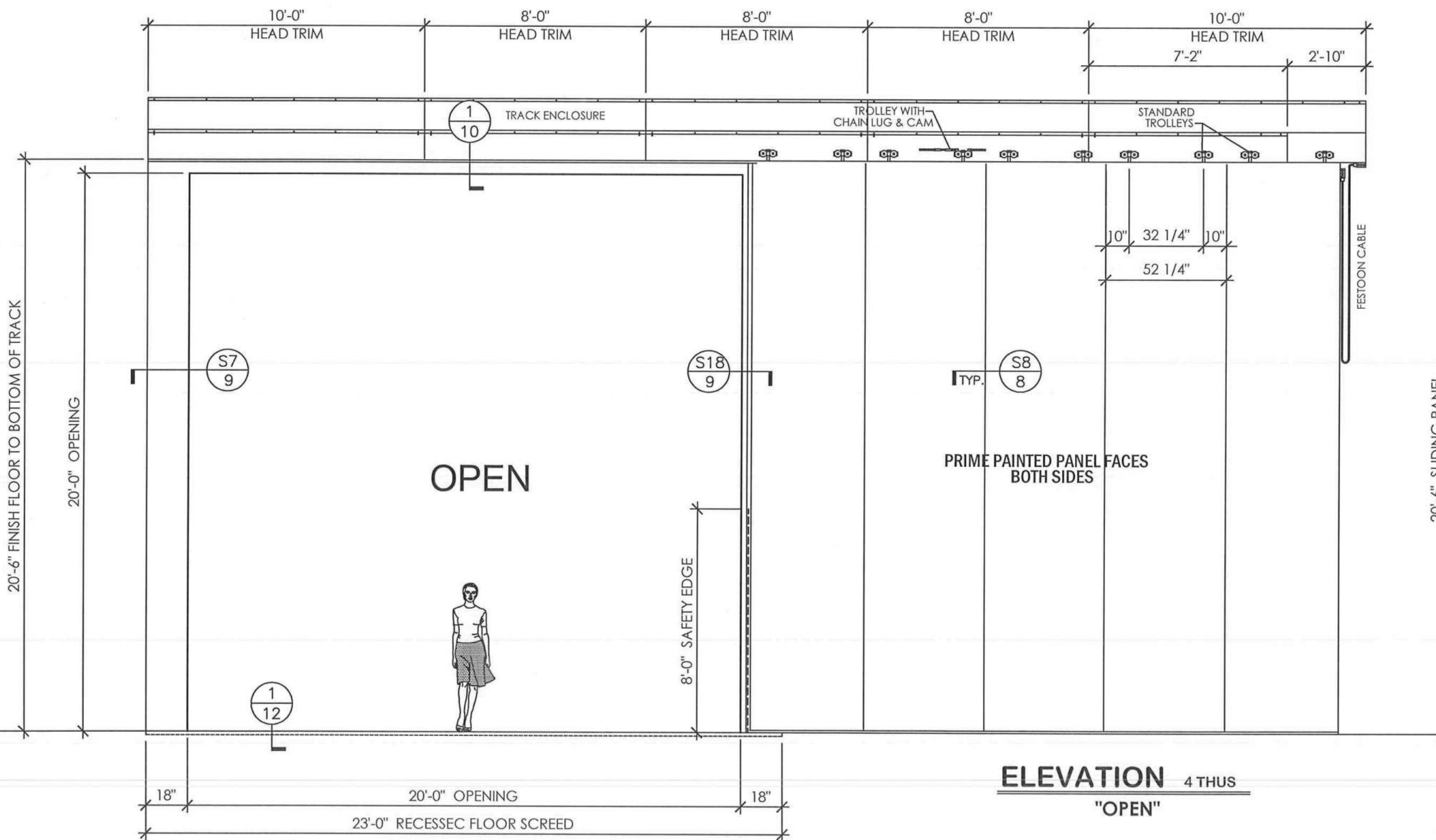
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SHEET 2 OF 25
13570
JOB NUMBER



PLAN VIEW
"OPEN"

EXTERIOR



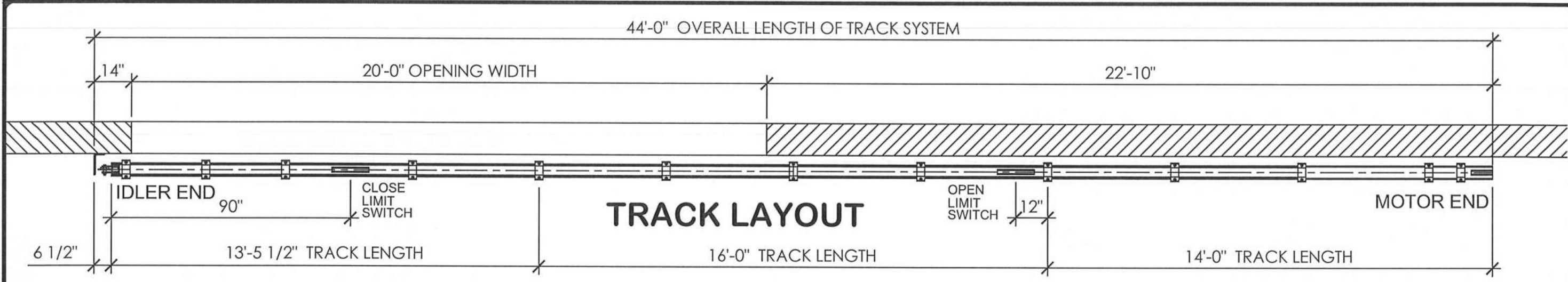
ELEVATION 4 THUS
"OPEN"

advanced equipment
CORPORATION

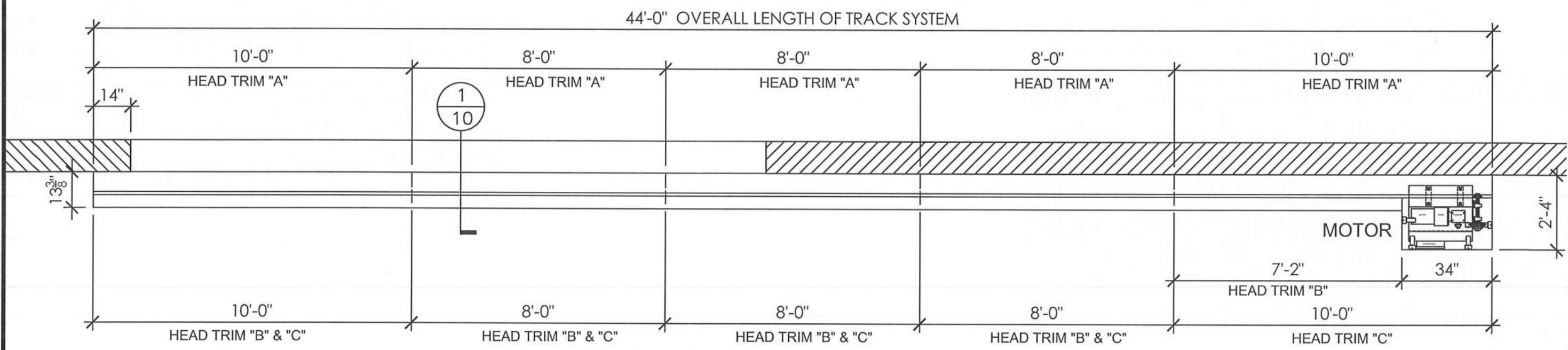
2401 West Commonwealth Ave
Fullerton, CA 92833
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ENGINEERING
BY: BOB DATE: 11/8/21
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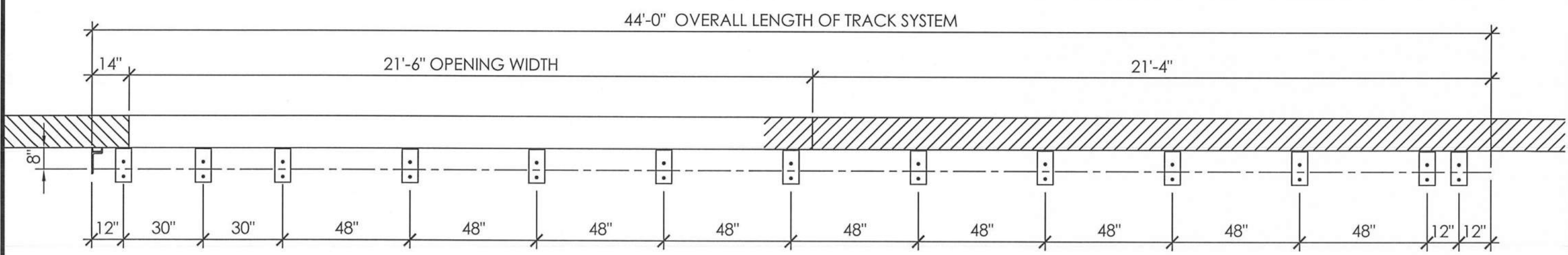
SHEET 3 OF 25
13570
JOB NUMBER



TRACK LAYOUT



HEAD TRIM LAYOUT



HANGER ROD SPACING TEMPLATE

SHEET

4

OF

13570

JOB NUMBER

ENGINEERING

BY: BOB

DATE: 11/8/21

REV:

DATE:

REV:

DATE:

2401 West Commonwealth Ave

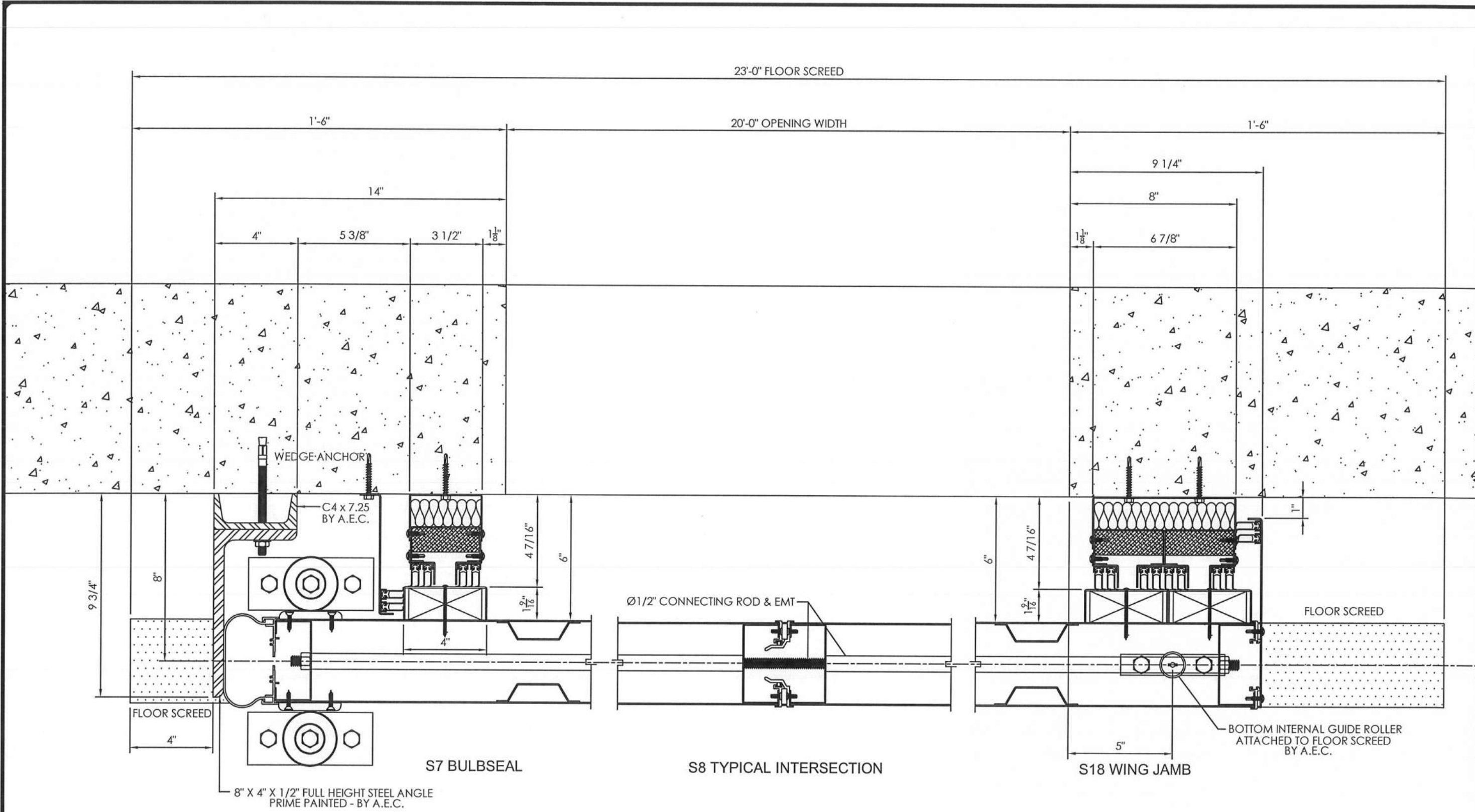
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ae

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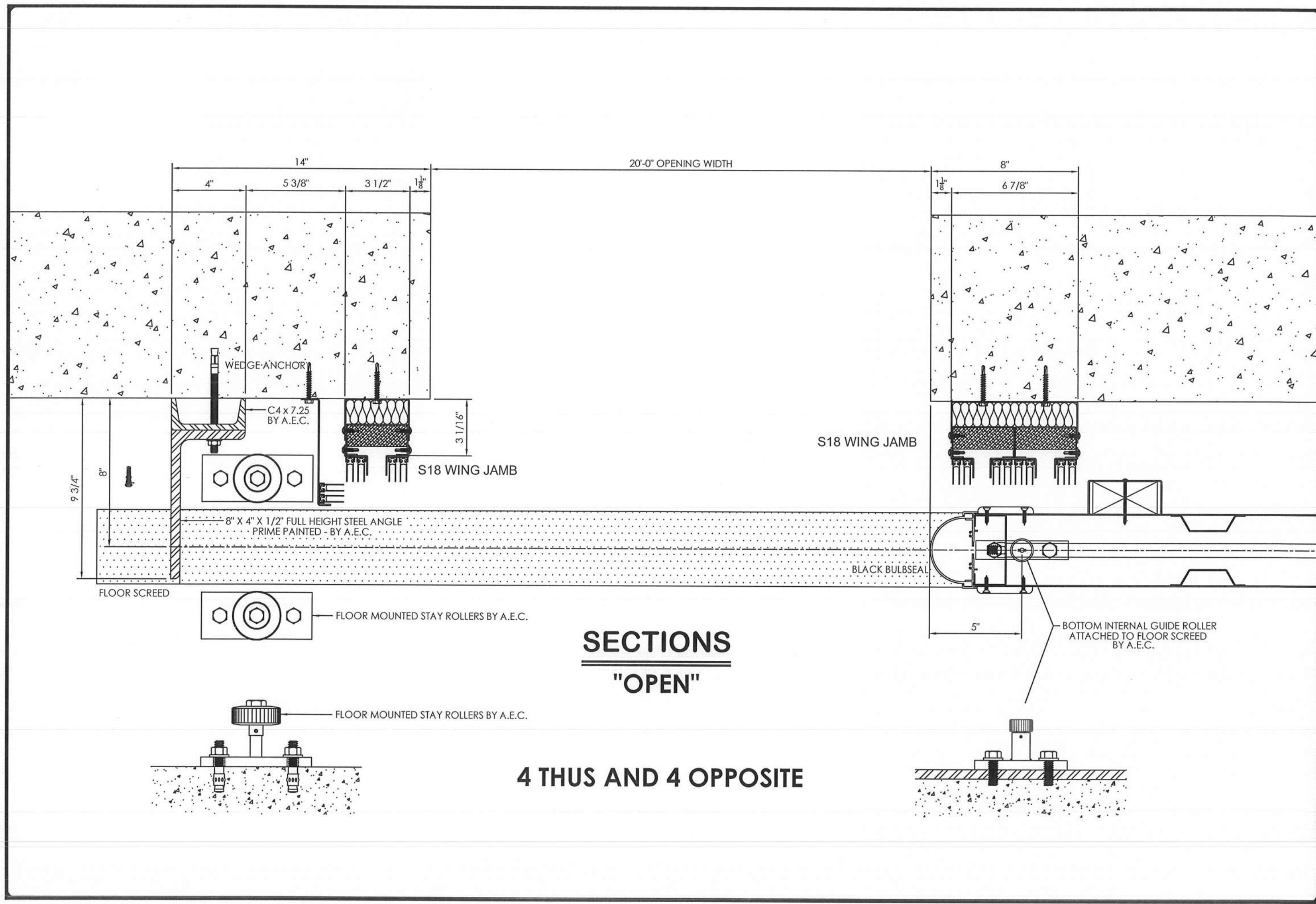
MEETING END

SECTIONS

"CLOSED"

4 THUS AND 4 OPPOSITE

TRAILING END



SECTIONS
"OPEN"

4 THUS AND 4 OPPOSITE

SHEET 9 OF 25

13570

JOB NUMBER

ENGINEERING

BY: BOB DATE: 11/8/21

REV: DATE:

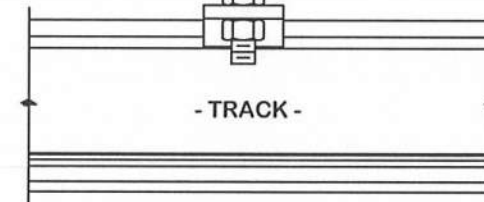
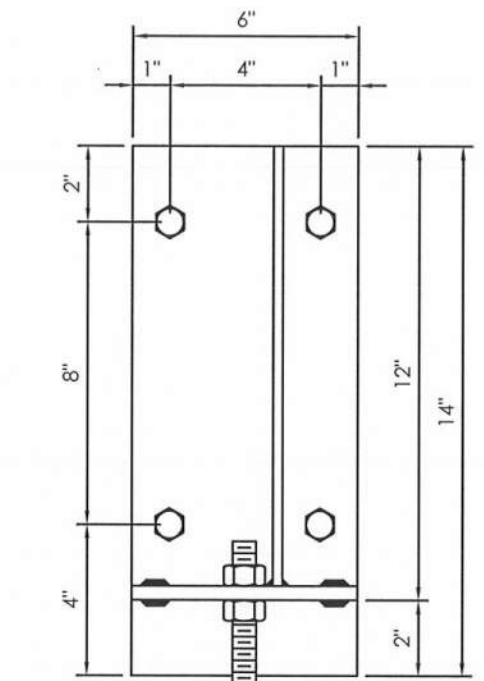
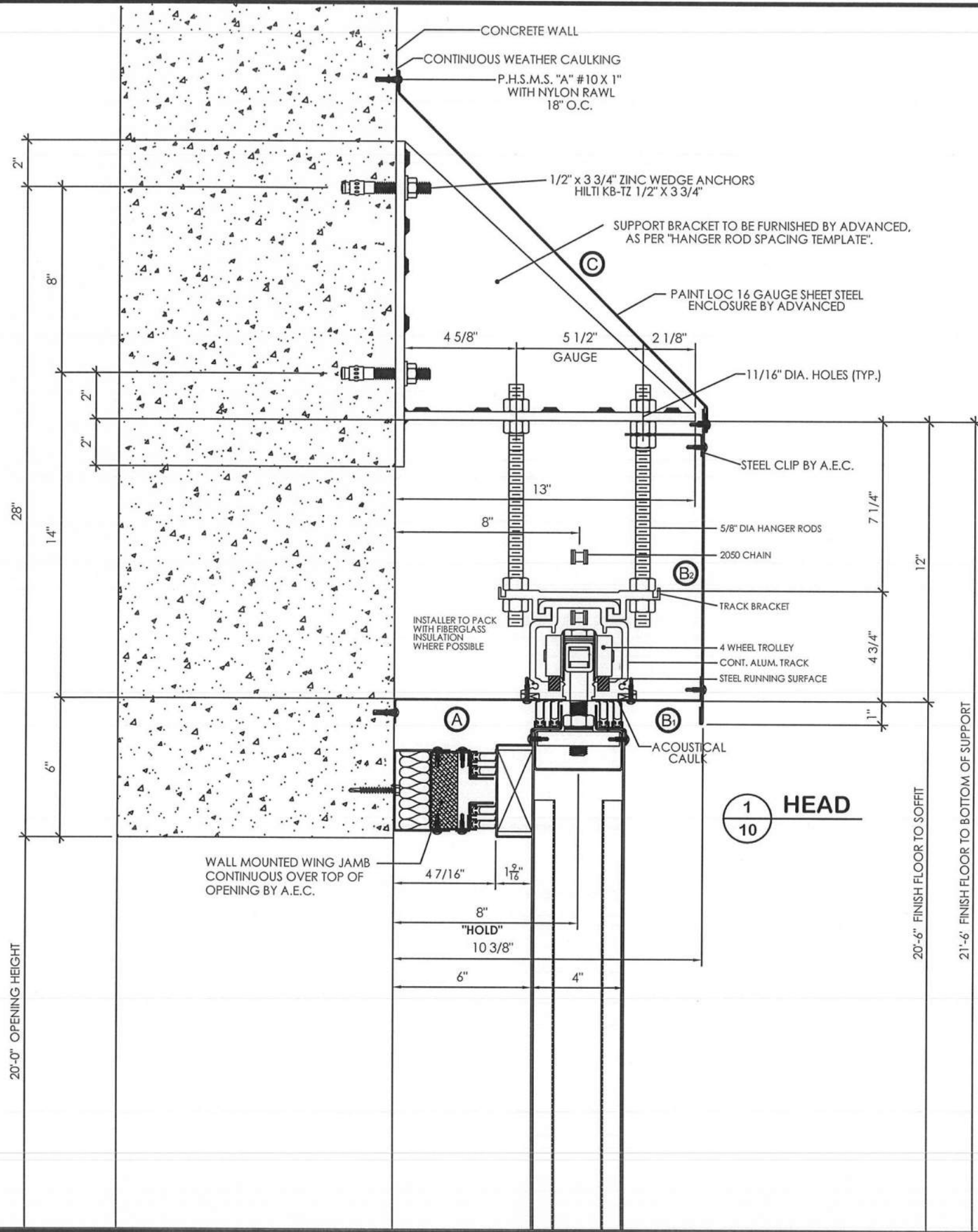
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Fullerton, CA 92833

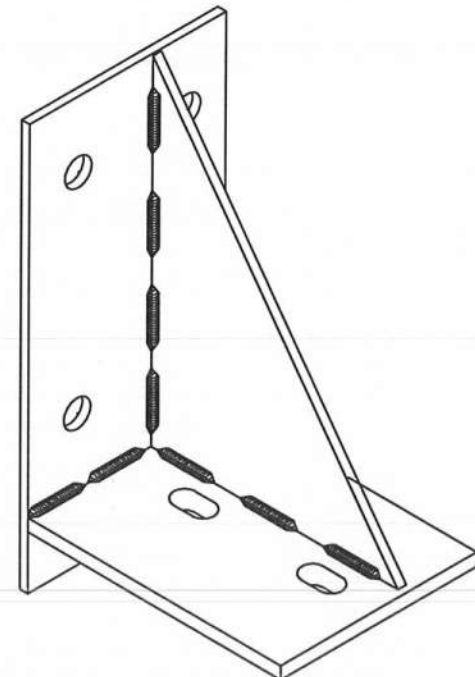
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equipment

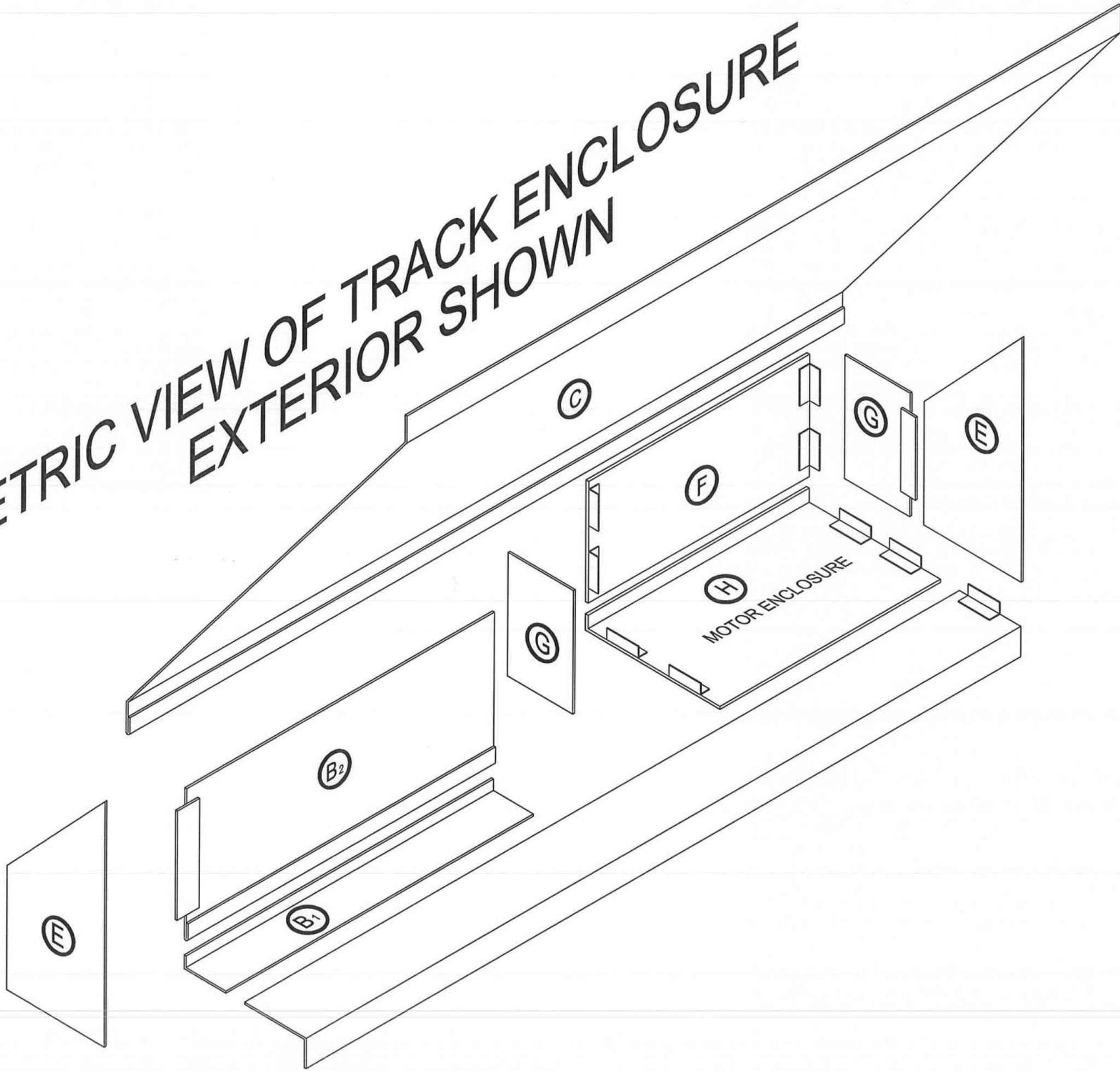
CORPORATION



SIDE VIEW AT BRACKET



ISOMETRIC VIEW OF TRACK ENCLOSURE EXTERIOR SHOWN



CLOPAY COMMERCIAL – MODELS 3200, 3211, 3213

energy series

Clopay®



POLYSTYRENE INSULATED STEEL DOOR

Clopay Models 3200, 3211 and 3213 are high-quality doors designed for commercial and industrial facilities, providing the durability of a full 24 gauge, heavy-duty exterior steel skin in an energy-efficient door system. R-Value 9.1.

- Bonded polystyrene insulation and thermal break for enhanced comfort.
- Three-layer construction with steel and insulation for increased durability.
- Three-stage paint process delivers a virtually maintenance-free finish.
- Injection-molded lite frames with integral weatherseal are durable and seal against the elements. Many glass options available for visibility, privacy or energy efficiency.

clopaycommercial.com



Steel skins are protected through a tough, layered coating system, including a hot-dipped galvanized layer, a protective metal oxide pretreatment and a baked-on primer and top coat. Ten-year warranty against rust-through.

PANEL DESIGNS



COLOR OPTIONS

MODEL 3200



ADDITIONAL COLORS FOR MODELS 3211, 3213



* Not available on Models 3211 and 3213.

† Additional charges apply.

Due to the printing process, colors may vary.

CUSTOM PAINT OPTION



Color Blast® finish offers more than 1,500 Sherwin-Williams® color options to complement your building design. This durable two-part paint system has been thoroughly tested and is backed by a five-year warranty.

Due to solar reflective formulation to meet greater than a 38 LRV, some colors may not be available.

FEATURES

STANDARD HARDWARE

- TPE astragal in corrosion-resistant retainer
- Commercial 10-ball steel rollers (nylon tires available)
- Steel step plate and lift handle
- Galvanized steel end stiles
- Inside slide lock for increased security
- 2" or 3" track
- 10,000 cycle springs
- Galvanized aircraft cable with minimum 7:1 safety factor
- Variety of track configurations to meet building specifications

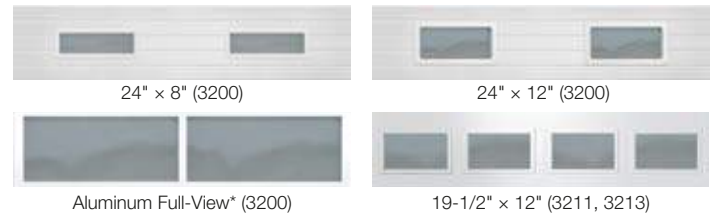
MATERIALS AND CONSTRUCTION

Panel Thickness	2"
Insulation	2" bonded polystyrene
R-value	9.1*
U-Factor	0.23
Air Infiltration	0.34 cfm/ft ²
Thermal Break	Continuous silicone filled
Exterior Steel	24 gauge (.58 mm)
Interior Steel	27 gauge (.41 mm)
Exterior Surface	Stucco embossed, minor ribbed (3200) Woodgrain embossed, flush (3211) Woodgrain embossed, elegant raised (3213)
Max Width	3200: 26'2"; 3211/3213: 20'2"
Max Height	3200: 24'; 3211/3213: 18'
Exterior Colors	Standard White, Almond, Desert Tan, Sandtone, Commercial Tan, Chocolate, Black, Gray, Trinar® White and Trinar® Beige. Also available in Color Blast® finish.
Interior Color	Standard White
Limited Warranties	10-year standard paint 5-year delamination 5-year Color Blast® finish 1-year material and workmanship

* Calculated door section R-value is in accordance with DASMA TDS-163.
For special sizes, applications and options, consult customer service at 1-800-526-4301.

ADDITIONAL OPTIONS

WINDOW OPTIONS



* Intellicore® polyurethane insulated option also available.

Model 3200 is available with insulated or insulated tempered glass. Full-view section, pre-painted Standard White or Chocolate; glazing options include DSB, plexiglass, wire and insulated glass. Models 3211 and 3213 are available with DSB, plexiglass and insulated glass.

HEAVY-DUTY HARDWARE (where not standard)



Double-end hinge

3" Track

High performance hardware features 10 gauge end hinges, heavy-duty top bracket and 3" sealed roller with 5/8" stem.

MULLIONS



Carry-away, roll-away or swing-up mullions are available on select sizes.

BREAK-AWAY SECTION



Single section and double sections available on select sizes. (3200)

PASS DOOR



32" wide x 80" high, max 16'2" wide section. (3200)

EXHAUST PORT



Can be cut into any type of sectional door. Available in select sizes.

SAFE-T-STOP™ CHAIN HOIST



Hand chain hoist with an integral braking system providing controlled descent for sectional doors.



WindCode® design pressure (DP) up to 52 PSF depending on size. Models tested 50% greater than DP.



EXTENDED
8-YEAR
HARDWARE
WARRANTY

Upgrade your standard door with industrial-grade components.

HIGH CYCLE SPRINGS



25,000, 50,000 or 100,000 cycle springs available.



CODE COMPLIANT

This Clopay door complies with the 2015 IECC (International Energy Conservation Code) with an air infiltration rating of .40 cfm/ft² or less (IECC, Section 402.5.2), and also meets the U-factor requirement of 0.37 or less (IECC, Section C402.4, for Climate Zones 1 through 8).



For more information on these and other Clopay products, visit clopaycommercial.com. Architects and specifiers, visit architectdoorhelp.com.



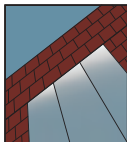
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CMDC-3200-00_REV0223

YES 45 TU

Thermally Broken, Center Set Storefront System



STOREFRONT SYSTEM

Product Description

The YES 45 TU is a thermally broken, center set, flush glazed storefront system for insulating glass. The system is thermally broken by means of a poured and debridged pocket that employs a patented process, ThermaBond Plus®, to greatly improve adhesion of the polyurethane to the extruded aluminum. Combining science and technology, ThermaBond Plus® resolves the problem of adhesion and the resulting dry shrinkage associated with typical poured and debridged systems.

Product Options & Features

- Excellent thermal performance utilizing standard 1" insulating glass
- Patented ThermaBond Plus® thermal break
- High Performance Sill Flashing
 - ◆ No Blind Seals
 - ◆ Tall back leg for enhanced water resistance
 - ◆ Patented 3-point attachment of end dam
- Assembled with either our Screw Spline or Shear Block Technology
- Integrates with our Model 20D/35D/50D Doors

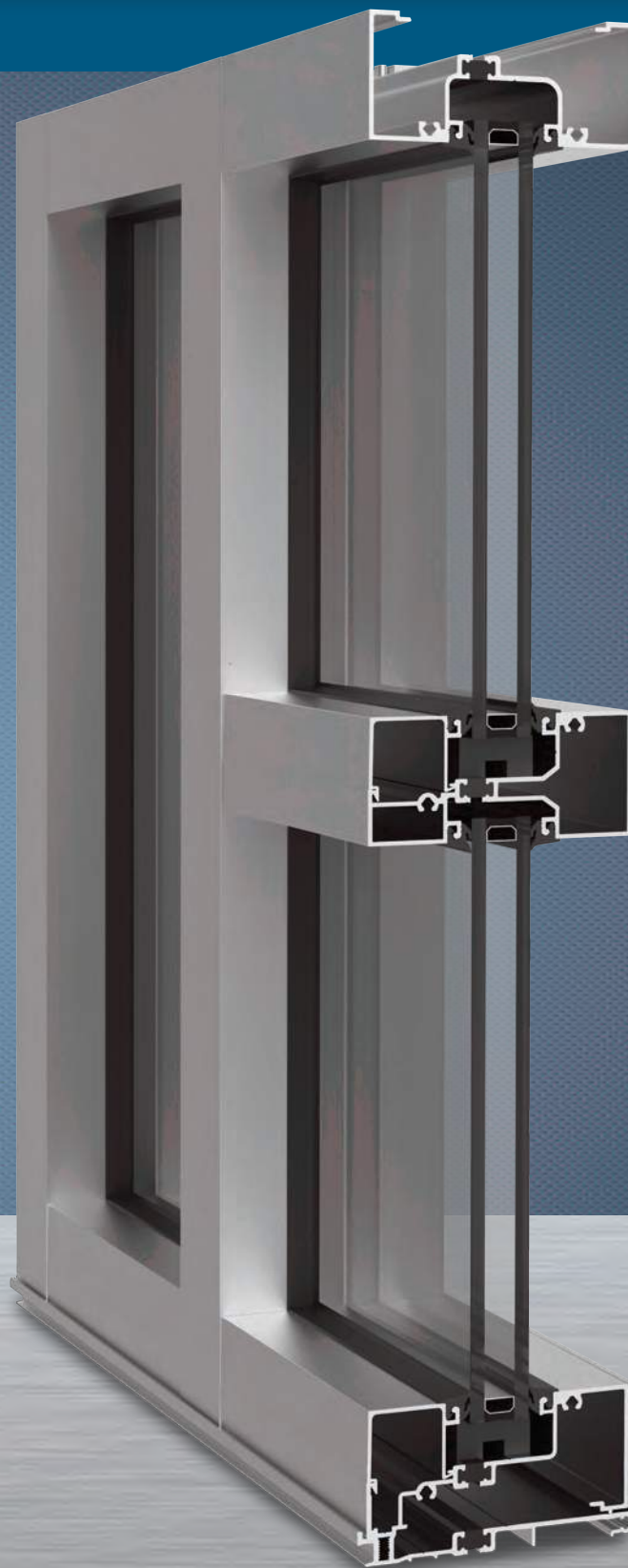
U-Factor Values as low as 0.32*

CRF Minimum 57_{frame} & 62_{glass}

*Based on AAMA 507. Lower values may be achieved through further simulation.



Quality
inspires®



YES 45 TU

SYSTEM SPECIFICATIONS

System Sightline	Base Depth	Glazing & Config	Glass	Air Infiltration	Water Infiltration	Acoustical Performance
2"	4-1/2"	Inside or Outside & Center Set	1" IGU with Low-E (C.O.G. U-factor: 0.29)	0.06 CFM/FT ² (1.10 m ³ /h·m ²) @ 6.24 PSF (299 Pa)	Static: 12 PSF (575 Pa)	Std STC: 32 Std OITC: 26 Lam STC: 36 Lam OITC: 30
Testing Standards				ASTM E 283	ASTM E 331 & AAMA 501	ASTM E 90 & 1425
Installation Options				Screw Spline or Shear Block with Monolithic or Insulating Glass		
Available Finishes				Factory Anodized (AAMA 612) and Organic Paints (AAMA 2604 & AAMA 2605)		

Thermal Performance						
1" IGU			BTU/hr·ft ² ·°F			
C.O.G U-Factor	0.30	0.28	0.26	0.24	0.22	0.20
2" x 4-1/2"	0.43	0.42	0.40	0.39	0.37	0.35
1" IGU			BTU/hr·ft ² ·°F			
C.O.G U-Factor	0.30	0.28	0.26	0.24	0.22	0.20
2" x 4-1/2" (XT Filler)	0.40	0.38	0.36	0.35	0.33	0.32
Testing Standards	AAMA 507 & NFRC 100					

CRF	
Frame	Glass
57	62
CRF	
Frame	Glass
Not Tested	Not Tested
AAMA 1503	

SILL FLASHING

- No Secondary penetration of sill and flashing.
- 2" back leg on sill flashing – enhanced water resistance in the field and in field water testing.
- Three point attachment of end dam, with two patented screw splines.
- No sill anchoring required if end reaction is less than 500 lbs.
- Sill flashing and end dams can be assembled and sealed in the shop. Much more secure during transport to job site.
- New silicone sill flashing splice sleeve seals more reliably and with less "bump".



THERMALLY BROKEN

ThermaBond Plus® process is a pour and debridged process that greatly improves the adhesion of the polyurethane material to the aluminum extrusion. Combining science and technology, ThermaBond Plus® process resolves the problem of adhesion and the resulting dry shrinkage associated with typical poured and debridged systems.

Additional information including CAD details, CSI specifications, Test Reports and Installation instructions are available online at:
www.ykkap.com/commercial/product/storefronts/yes-45-tu-center-set/

Central Seam Plus®

Standing Seam Roof Panel

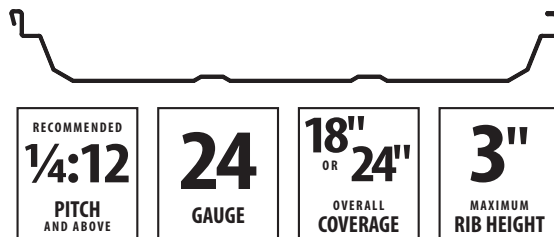


Ideal for *commercial* and *industrial* applications

Central Seam Plus is perfect for economical commercial and industrial applications that need the extra strength and durability of a mechanically-seamed roof.

Pre-punched panels are available and self-engaging backup plates allow for easier installation.

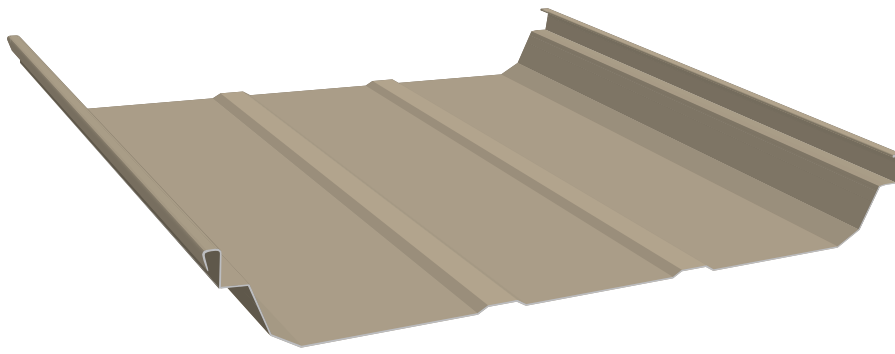
- Factory applied sealant ensures a weather-tight and secure lap.
- Floating clips allow for thermal roof expansion and contraction during extreme temperature changes.
- Add DripX for condensation control and vapor barrier elimination.



CENTRALSTATESMFG.COM

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Galvalume® is a registered trademark of BIEC International, Inc.

CE FLYR_CentralSeamPlus_190402.1



Choose an energy efficient finish.

Solar Reflectivity is the metal panel's ability to reflect sunlight. This characteristic of metal roofing is the most important in terms of energy savings. Cool metal roofing reflects much of the sun's rays, making the surface of the metal much cooler than material with a lower solar reflectivity rating.

Emissivity is the metal panel's ability to release absorbed heat. A low emissivity rating means the material will be hot to the touch (it doesn't release the heat), while material with a higher emissivity rating will be cooler to the touch. Therefore, metal with a low emissivity rating retains heat and may be more desirable for a cooler climate, while a high emissivity rating reflects heat and is more effective for saving energy in a warmer climate.

COLOR	INITIAL SOLAR REFLECTIVITY	INITIAL EMISSIVITY
Ash	0.32	0.83
Autumn	0.21	0.87
Brite	0.55	0.83
Bronze	0.25	0.83
Dark Bronze	0.25	0.83
Evergreen	0.27	0.85
Galvalume® (Acrylic Coated)	0.77	0.08
Sand	0.35	0.75
Slate Gray	0.18	0.87
Smoke	0.25	0.83
Terratone	0.32	0.83
Tudor	0.29	0.88
Verdigris	0.32	0.83

Solar reflectance values are determined by means of a solar spectrum reflectometer in accordance with ASTM C 1549. Thermal emittance values are determined in accordance with ASTM C 1371. Laboratory and Exposure site are ISO 17025 Accredited, Laboratory is also EPA Accredited. Panels are unwashed. Values are correct at time of printing. Ratings may change as paint technologies change. Check our website for details.

MINIMUM SPECIFICATIONS FOR PRIME PAINTED PANELS

GAUGE
24 ga.

STEEL THICKNESS
0.023"

PAINT THICKNESS
Top coat paint: .70 mil
Top coat primer: .30 mil
Bottom coat backer: .35 mil
Bottom coat primer: .20 mil

TOTAL THICKNESS
0.02455"

RUST PROTECTANT SUBSTRATE
Galvalume® AZ50

STEEL STRENGTH
50,000 PSI min

PAINT SYSTEM
Fluropon®

WARRANTY
Lifetime limited paint adhesion
30-yr. chalk and fade
20-yr. Galvalume perforation

TESTING & APPROVALS

TESTING

- ASTM-E1592.1 Structural Test for Roof Systems, 24 ga.
- ASTM-E1680 Air Leakage Test Through Exterior Metal Roof Panel
- ASTM-E1646 Water Leakage Test of Exterior Metal Roof Panel
- FM4471 Foot Traffic Resistance Test

APPROVALS

- UL2218 UL Approval, Impact Resistance, Class 4
- UL580 UL Approval, Uplift Resistance, Class 90
- UL790 UL Approval, Fire Resistance, Class A
- FL14016 Florida Approval, 24 ga. Roof Panel Over Open Supports (NON-HVHZ)
- RC-448 Texas Windstorm Approval, 24 ga., With Wind Clamps, Over Steel Purlins
- RC-449 Texas Windstorm Approval, 24 ga. Over Steel Purlins

Find more information at
centralstatesmfg.com



Matte Black

Smoke

Slate Gray

Ash

Brite



Choose CentralGuard for the best protection and a lifetime warranty.

Architectural

Color Selection Tool



24 GAUGE
FLUROPON® 70% PVDF



centralstatesmfg.com

SHERWIN-WILLIAMS®
Coil Coatings

Evergreen



Autumn

FEVE Color



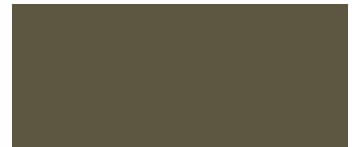
Dark Bronze



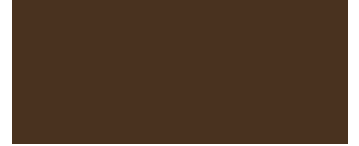
Bronze



Terratone



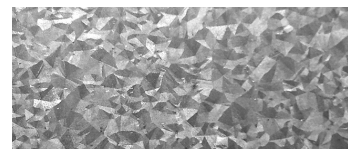
Tudor



Sand



Galvalume®†
Clear acrylic coating



† Weathering and appearance variation, including color, sheen, and spangle, is common in non-painted materials and is not a cause for rejection. For consistent appearance, choose a paint-finished product. Colors on this chart are close representations of actual metal color, limited by printing and viewing conditions. Color matching optimized for outdoor viewing.

Choose an energy efficient paint finish.

Solar Reflectivity is the metal panel's ability to reflect sunlight. This characteristic of metal roofing is the most important in terms of energy savings. Cool metal roofing reflects much of the sun's rays, making the surface of the metal much cooler than material with a lower solar reflectivity rating.

Emissivity is the metal panel's ability to release absorbed heat. A low emissivity rating means the material will be hot to the touch (it doesn't release the heat), while material with a higher emissivity rating will be cooler to the touch. Therefore, metal with a low emissivity rating retains heat and may be more desirable for a cooler climate, while a high emissivity rating reflects heat and is more effective for saving energy in a warmer climate.

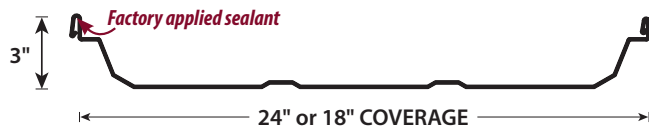
COLOR	INITIAL SOLAR REFLECTIVITY	INITIAL EMISSIVITY	SRI VALUE
Ash	0.32	0.84	32
Autumn	0.26	0.84	24
Brite	0.65	0.85	78
Bronze	0.27	0.86	26
Dark Bronze	0.27	0.85	26
Evergreen	0.26	0.84	24
Galvalume® (Acrylic Coated)	0.69	0.19	62
Sand	0.48	0.86	54
Slate Gray	0.18	0.88	15
Smoke	0.32	0.85	32
Terratone	0.32	0.87	33
Tudor	0.26	0.86	32
Matte Black	0.26	0.85	24

Solar reflectance values are determined by means of a solar spectrum reflectometer in accordance with ASTM C 1549. Thermal emittance values are determined in accordance with ASTM C 1371. SRI is calculated in accordance to ASTM E 1980 with medium wind speed. Panels are unwashed. The Sherwin-Williams company certifies these tests to be true and accurate and performed by their laboratory.

For information on energy savings, visit www.centralstatesmfg.com/energy-savings

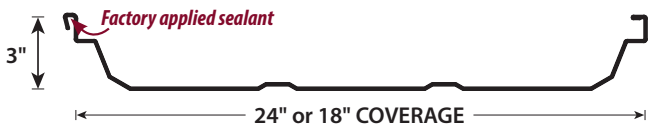
Central-Loc® - 3" Snap-lock

Recommended minimum pitch - 1/4:12 | Purlin spacing - 5'



Central Seam Plus® - 3" Mechanically Seamed Structural

Recommended minimum pitch - 1/4:12 | Purlin spacing - 5'



Central Span™ - 2" Mechanically Seamed Structural

Recommended minimum pitch - 1/4:12 | Purlin spacing - 5'



Central Snap® - 1 3/4" Snap-lock

Recommended min. pitch - 1:12 | Non-structural panel perfect for light commercial applications.



Precision-Loc™ - 1" Soffit and Wall Panel

Concealed fastener panel with clean lines that complement a building's walls and soffits.

