



# WELCOME

VIRTUAL MEETING WILL BEGIN AT

**11:30 AM Central**

Society of American Military Engineers

Omaha Post

August 6<sup>th</sup> Meeting



# Omaha Post Meeting

**Society of American Military Engineers**  
**Omaha Post**  
**August 6<sup>th</sup>, 2024 Meeting**

# Meeting Agenda

- Pledge of Allegiance
- New Member/ Guest Introductions
- Invocation
- Lunch
- Announcements
- Membership Spotlight
- Presentation
- Q&A
- Split Kitty Drawing
- Closing Remarks

# Pledge of Allegiance



I pledge allegiance to the Flag of the United States of America, and to the Republic for which it stands, one Nation under God, indivisible, with liberty and justice for all.

## Introductions

- Welcome SAME Student Chapter Members
- Welcome New SAME Members
- Introduction of Guests

# Invocation

Please join us in the invocation before we dismiss for lunch

# Lunch

Dismiss by table

# Announcements

- **Second Annual DHA Operations & Management Industry Day – August 13-15, 2024**
  - ▶ Dates: August 13-15, 2024
  - ▶ Where: Estancia del Norte Hotel, 37 NE 410 Loop, San Antonio, TX 78216
  - ▶ NAICS Code desired: 561210
  - ▶ More information and to Register: <https://sam.gov/opp/e174392bf549400986c93a87e95b0a76/view>
- **Veterans Outreach - 50 Mile March: Operation Noble Watchman 2024**
  - ▶ This year the Omaha Post's Veterans Outreach will be supporting the 50 Mile March Foundation and their *mission to empower Veterans facing mental health challenges and homelessness by fostering a community of hope and relentless support.*
  - ▶ This year there is a **need for over 100 volunteers over August 24-25**
  - ▶ Please direct any questions regarding volunteer opportunities to Brianne Schuler at [director@50milmarch.org](mailto:director@50milmarch.org) or (402) 706-6470 or Leon Haith at [leon.haith@50milmarch.org](mailto:leon.haith@50milmarch.org) or (402) 669-3402.



# Announcements

## ▪ **Virtual Matchmaking Event**

- ▶ Prime Connections: Bridging Opportunities, a premier virtual matchmaking event designed to connect prime contractors with small businesses.
- ▶ Omaha Post is partnering with the Nebraska APEX Accelerator to host the virtual event
- ▶ August 28<sup>th</sup> – registration link: <https://mbmapp.com/event/samevirtual2024>

## ▪ **Metropolitan Community College Revit Fundamentals Course**

- ▶ For the first time, Metropolitan Community College is offering a completely online option for REVIT FUNDAMENTALS beginning September 3<sup>rd</sup>
- ▶ ARCH 1105 Revit Fundamentals Online is specifically designed to equip working professionals with the relevant, practical skills needed to start projects using Revit in the AEC industry, where competent BIM technicians are in such high demand.
- ▶ The ideal participant is currently employed at an AEC firm and is either personally looking to upskill or is being sponsored by their employer to build their proficiency with Revit software. With this course being 100% online, there is no “class time” and participants are responsible for their own engagement and completion of the coursework.
- ▶ Please reach out to Katie Graves Bullie at [kgravesbullie@mccneb.edu](mailto:kgravesbullie@mccneb.edu) or call 531-622-2696 with questions or to begin registration for this course.

# Announcements

- **Omaha Post General Membership Meeting September 2024**
  - ▶ September 12<sup>th</sup> at Field Club of Omaha
  - ▶ Topic: Midwest Flood Recovery
  - ▶ Speaker: TBD

# Remembering Ed Morrissette

- **Honoring a fallen hero and devoted SAME Omaha Post member and supporter**
  - ▶ Ed, was a staunch supporter and active member of the Omaha Post even after he retired from OPPD. Truly one of “The Greatest Generation”.
  - ▶ Link to Omaha World Herald Article: [https://omaha.com/news/local/nebraska-d-day-vet-who-stormed-omaha-beach-dies-at-100/article\\_0a46ef62-37e4-11ef-b790-77f7f8755599.html](https://omaha.com/news/local/nebraska-d-day-vet-who-stormed-omaha-beach-dies-at-100/article_0a46ef62-37e4-11ef-b790-77f7f8755599.html)



BRENDAN SULLIVAN, THE WORLD-HERALD



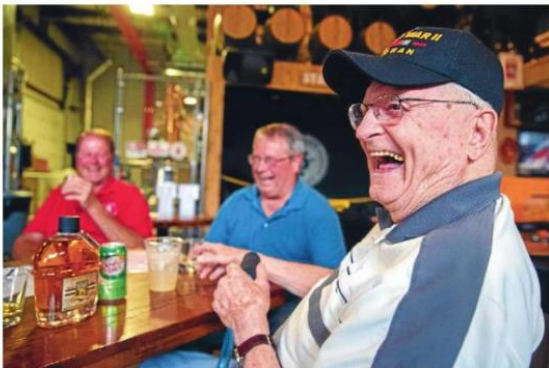
# Remembering Ed Morrisette

## Omaha World-Herald

MONDAY, JULY 8, 2024

WHERE YOUR STORY LIVES

OMAHA.COM



**BRENDAN SULLIVAN, THE WORLD-HERALD**  
On the 75th anniversary of D-Day, Ed Morrisette, a WWII veteran of Papillion, toasts comrades while having a drink with friends at Patriarch Distillers Inc. in La Vista. Morrisette was part of the second wave on D-Day at Omaha Beach. He died June 24 at age 100.

### D-Day veteran who stormed Omaha Beach dies at 100

Ed Morrisette led a machine gun squad during fateful day in 1944

**STEVE LIEWER**  
World-Herald Staff Writer

Ed Morrisette squinted through misty morning fog at the French coastline toward a beach code-named Omaha.

The 20-year-old soldier with the storied 1st Infantry Division had endured a rough ride across the English Channel in a wind-whipped ship.

Now, as June 6, 1944, dawned — D-Day — a sailor released the front door of his landing craft. Morrisette and another soldier dropped side-by-side into the neck-deep surf. Along with their rifles, together they held aloft a large roll of communications wire.

But the wire roll made a fat target for well-placed German machine-gun fire, which splattered in the water all around them. They quickly dropped it and made for the beach. Morrisette waded past the bodies of dead Americans, floating in the waves.

"I could not take the time to stop



**Ed Morrisette joined the Army at age 17 and fought in Africa and Europe.**

and powder what was happening," he wrote years later in an account of his wartime service. "My main goal was to get up on that beach in one piece and join up with my company."

Morrisette, of Papillion, survived D-Day, and 11 more months of combat before World War II ended in Europe. He lived another

eight decades before his death June 24, and less than a month after the 80th anniversary of D-Day. He was 100.

Guillaume Lacroix, the French consul general in Chicago, praised Morrisette as a "true hero" in 2019 in presenting him with the French Legion of Honor, the nation's highest military and civilian award, at a cemetery in the Elkhorn area.

"The debt we owe you, the 'Greatest Generation,' is a debt we will never be able to repay," Lacroix said. "For all your actions, I want to say, 'Thank you!'"

Edward Morrisette was born July 27, 1923, and endured what he called "tumultuous" years during his childhood in Depression-era North Carolina.

"I had come from a broken home, my family was scattered, my mother and father divorced," Morrisette wrote.

He lived with an aunt and dropped out of high school to work. In 1940, expecting to be drafted, he visited an Army recruiter. He led about his age because he wasn't yet 18.

PHOTO BY STEVE LIEWER, PAGE A2

A2 | MONDAY, JULY 8, 2024

MAIN NEWS

OMAHA WORLD-HERALD

### Veteran

From A1

Morrisette chose an assignment with the 16th Infantry Regiment of the 1st Infantry Division, headquartered in New York City. "I was enamored with the idea of going to the 'big city' to see those tall buildings, and all those people," Morrisette wrote.

The unit moved to Fort Devens, Massachusetts, in early 1941. He was hospitalized there for 42 days after a piece of steel wool embedded in his finger and became infected — the most serious wound he received despite spending three years in combat zones.

The division's training ramped up after the Dec. 7, 1941, attack on Pearl Harbor. The following summer, his unit deployed to Great Britain aboard the luxury liner Queen Mary, zig-zagging across the ocean to avoid German U-boats.

In November 1942, his regiment participated in Operation Torch, the invasion of North Africa. Morrisette's unit stormed ashore near Oran, Algeria, overcoming light resistance from Vichy French troops. During the campaign, he earned a Bronze Star for shooting down a German fighter plane.

In July 1943, Morrisette and his 1st Infantry Division comrades embarked on their second amphibious assault of the war against Sicily, a large island off the toe of boot-shaped Italy. Allied forces retook the island during a six-week campaign in July and August 1943.

"The Germans and Italians were on the run, and we chased them all the way to Palermo," he wrote in his memoir.

#### 'Who could harm us with all this firepower?'

His division returned to England for months of training ahead of the invasion of northern France. Morrisette was put in charge of a machine gun squad.



**STEVE LIEWER, THE WORLD-HERALD**

World War II veteran Ed Morrisette of Papillion receives the French Legion of Honor from Guillaume Lacroix, the consul general of France to the Midwest, in 2019. Morrisette dodged German machine-gun fire when he landed on Omaha Beach.

He wrote that he and his fellow soldiers were nervous about the fight ahead. But on D-Day morning, he took comfort seeing the massive armada assembled to storm the beaches of Normandy.

"Who could harm us with this firepower behind us?" he wrote.

Yet the first hours on Omaha Beach saw individual soldiers, or small groups, huddled together under impenetrable German fire as their comrades fell dead all around them.

Morrisette somehow made it to shore and took shelter behind a concrete pillar with two other soldiers, smoking cigarettes he had kept dry by packing them in cellophane.

"Each time we stuck our foot out from behind the pillar, the machine gun fire would kick up sand right beside the pillar," he wrote.

Eventually the machine gun was silenced. Morrisette was able to crawl through the sand and find other members of his unit, bunkered down at the top of the beach.

He had survived what came to be known as "The Longest Day," but Morrisette's war was far

from over. His unit fought its way through the hedgerows of Normandy and across France. During the fall and winter of 1944, he saw action in the battles for Aachen, Germany, the Hürtgen Forest and the Bulge.

By the time Germany surrendered in May 1945, his 16th Regiment had reached Czechoslovakia. He sailed for home that summer and was discharged from the Army in September 1945.

#### Strategic Air Command and a family

After the war, Morrisette earned a civil engineering degree at Indiana Tech. That's where he met his wife, Doris, whom he married in 1951. Together they raised four sons and one daughter.

After four years as a traffic engineer for Virginia's roads department, Morrisette took a civilian job with the Strategic Air Command in California in 1957, overseeing maintenance of runways, roads and hangars at several SAC bases there.

His work for SAC brought him to Offutt Air Force Base in 1972 as maintenance supervisor for the



**BRENDAN SULLIVAN, THE WORLD-HERALD**

Ed Morrisette of Papillion fought through all of World War II in Europe, from North Africa and Italy, through D-Day when he landed in the second wave on Omaha Beach, Normandy, the Rhineland, all the way to 'E Day. He is shown here in June 2019 on the 75th anniversary of the D-Day landings.

unit's headquarters building.

"He had access to the underground (command) bunker at SAC," said Richard Morrisette, 72, the oldest of Morrisette's five children. "He would sometimes disappear — we wouldn't see him for a few days at a time."

In the mid-1970s, Morrisette retired from SAC and took a job at the Omaha Public Power District. He retired for good in 1981, his son said, but he did not stay idle. He was active with the First Lutheran Church in Papillion and American Legion Post 32, where he served as commander in 2001-02. He enjoyed hunting, fishing and woodworking.

"He was a great storyteller," said Kate Morrisette, Ed Morrisette's daughter-in-law. "When people met him, they felt like he was a friend."

He didn't tell stories about his D-Day experiences until late in his life. But when he was in his

90s, Morrisette told his story at schools, to a generation whose parents weren't yet born when he fought in World War II. He wrote his 15-page war memoir to help his granddaughter with a school assignment.

But as the number of D-Day survivors dwindled, he received more attention. On his 94th birthday — which coincided with the 1st Infantry Division's centennial celebration — the unit's commander called to congratulate him. Hundreds of "Big Red One" veterans joined in a Happy Birthday cheer.

#### 'Truly the greatest generation you represent'

And in 2019, then-Gov. Pete Ricketts led a group of VIPs when the French government awarded him its highest honor.

"Your example of sacrifice and heroism continue to inspire generations of men and women," Ricketts, now a U.S. senator, said at the time. "It is truly the greatest generation you represent."

Morrisette continued to deflect credit to others.

"I don't know that I particularly deserve this," he said. "But I know the men and women of the 1st Division who landed in France deserve it."

"I thank you from the bottom of my heart."

A memorial service for Ed Morrisette will be held at 10:30 a.m. Aug. 16 at First Lutheran Church in Papillion. Private inurnment is planned at the Omaha National Cemetery.

His wife, Doris, died in 2017 and is buried in Indiana. He is survived by four sons — Richard, of Oxford, Mississippi; Steven, Mark and Jeffrey, all of Omaha; one daughter, Denise Asbell, of Prescott, Arizona; five grandchildren; and three great-grandchildren.

sliewer@omh.com;  
twitter.com/SteveLiewer

# Membership Spotlight

**EATON**

*Powering Business Worldwide*



A photograph showing two individuals shaking hands in a firm grip. The person on the left is wearing a light blue long-sleeved shirt and a high-visibility yellow safety vest. The person on the right is wearing a dark grey jacket and a high-visibility yellow safety vest, and is holding a rolled-up white document. The background is an industrial facility with various pipes, scaffolding, and structures under a clear blue sky.

# Eaton Corporation

*Powering Business  
Worldwide*



# Electrical Sector overview

## Solutions for the entire power system

- IT and data centers
- Oil & gas, mining, industrial
- Electric utility
- Commercial
- Institutional
- Government
- Alternative energy
- Residential



Power distribution  
& circuit protection

Backup  
power protection

Engineering  
Services

Control &  
automation

Structural &  
wiring devices

Solutions for  
harsh & hazardous  
environments

Lighting &  
security



# Power distribution and circuit protection

Delivers reliable, efficient and safe power where it is needed



LV/MV switchgear

Panelboards & switchboards

Circuit breakers

Fuses

Transformers



# Backup power protection

Maximizes reliability and continuous uptime to prevent business interruptions



Uninterruptible power systems



Power distribution units (PDUs)



Paralleling switchgear



Transfer Switches



Surge protection & power factor correction



# Complete Life Cycle Solutions with Eaton's Engineering Services Capabilities



## Electrical Power Distribution Field Services

- 24/7 Emergency response
- Acceptance testing
- Startup
- Commissioning
- Maintenance
- Service contracts
- Multi-manufacturer expertise



## Electrical Systems Studies

- Short-circuit and coordination studies
- Arc flash studies
- Load flow analysis
- Harmonic studies
- CYME modules
- Microgrid feasibility studies
- Safety training



## Switchgear Modernization

- Low and medium voltage circuit breaker replacements and retrofills
- Remote racking
- Breaker reconditioning
- Replacement switchgear doors
- Arc flash mitigation



## Foreseer Electrical Power Monitoring System

- Custom power monitoring
- Vendor-agnostic
- Reporting
- Training



## Electrical Power Distribution Automation and Control Solutions

- Automatic power transfer upgrades & control systems
- Network design architecture
- PLCs & dashboards
- Multi-function protective relays-based monitoring & control systems



## Cybersecurity Services

- Initial audit
- Comprehensive analysis
- Life-cycle management



## Turnkey Electrical Solutions

- Project management
- Substation design/build
- Multi-vendor equipment supply chain
- Engineering, Procurement & Construction (EPC)
- Crisis response
- Embedded resources



## Grid Modernization Solutions

- Microgrid Systems & Distributed Energy Resources
- Synchronous Condenser Solutions
- Transmission & Distribution Solutions
- Modular & Mobile Solutions
- Hydroelectric Solutions

# Why Eaton's Engineering Services?

## People

- > 1,500 service professionals in North America
- > 100 power systems engineers
- > 100 licensed professional engineers
- > 15 dedicated EHS and training resources

## Locations

- > 60 service operations centers
- 18 panelboard and switchboard satellite service centers
- 4 power breaker centers
- 24/7/365 emergency service



## Experience

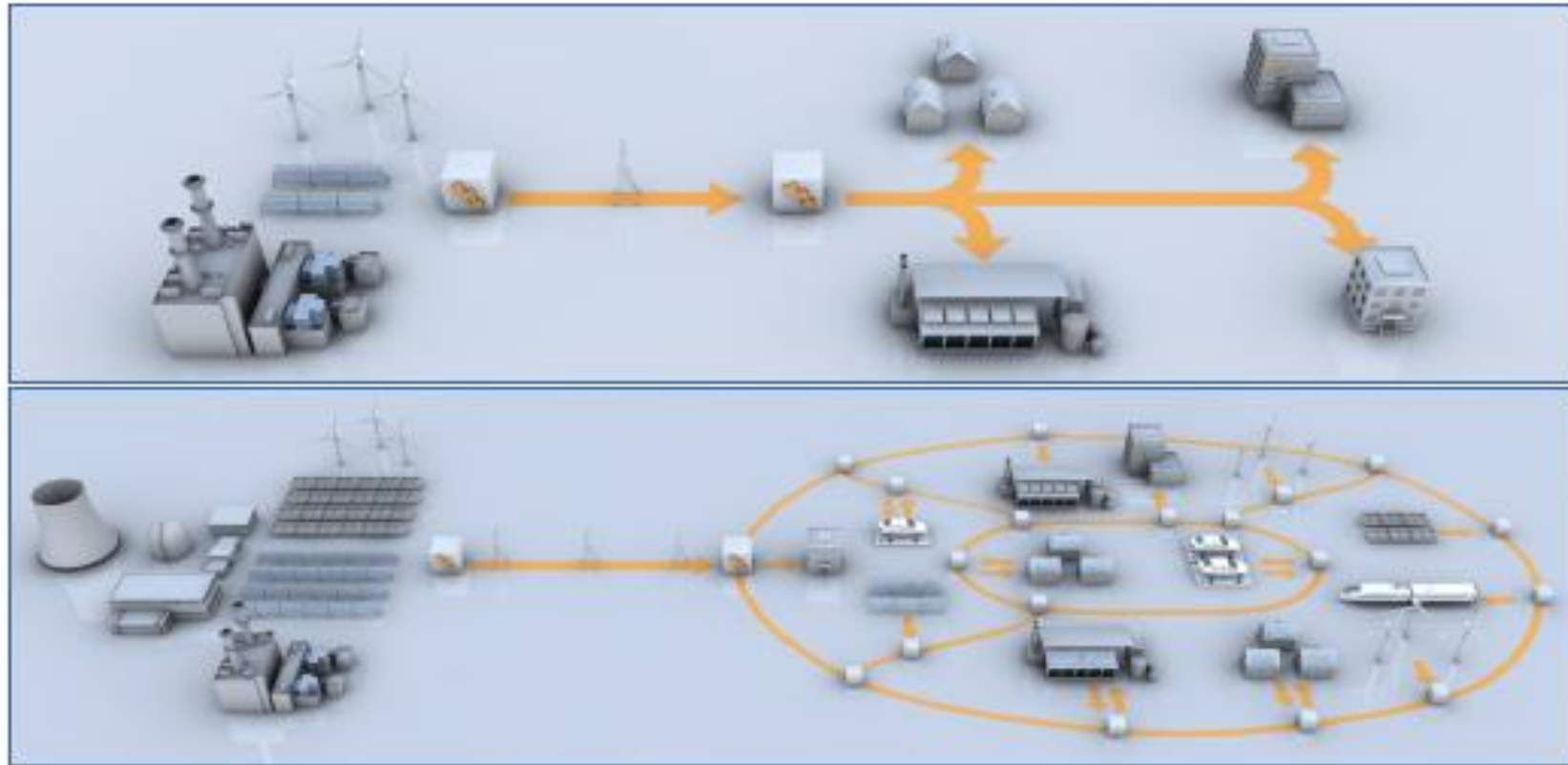
- Active on standards committees (IEEE 1584, ANSI, NEMA NFPA 70E, CSA Z462, CNCA)
- Extensive power distribution equipment knowledge and power system expertise
- Trained on leading manufacturers' equipment and monitoring and control systems

## Success

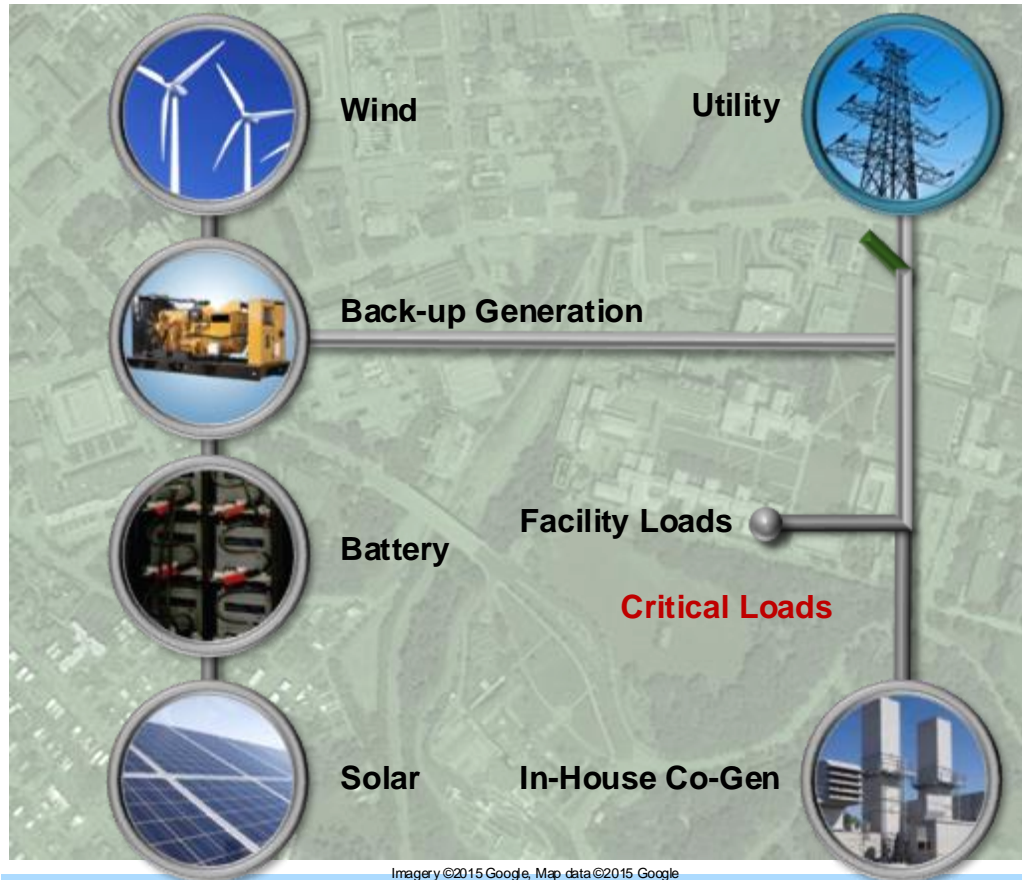
- >3,000 power systems studies conducted annually
- 94.1% customer satisfaction rate
- 72.3 net-promoter score (70 is world-class)
- 98.4% on-time arrival rate



# Energy and Grid Transformation



# The microgrid energy system concept



A group of generating assets and defined loads that can operate within the utility grid or islanded from the grid, as a self-sufficient stand alone application

## Local “Grid Within a Grid”

- Delivers Power Resilience, Reliability and Uptime

## Distributed Energy Sources

- Backup Generation
- In-House Co-Gen
- CHP (Combined Heat and Power)
- On-Site Renewables and Fuel Cells
- Energy Storage (Batteries)

## Microgrid Applications

- Islanding & Synchronization
- Black Start
- Generation/Load Balance Control
- Battery Energy Storage & Frequency Regulation

Requires Control System “Glue” to Achieve System Performance

---

The Eaton logo is rendered in a bold, blue, sans-serif font. The letters 'E', 'A', and 'T' are connected to the 'O', which contains a white dot. The 'N' is separate and follows the 'O'.

*Powering Business Worldwide*

# Advancements in Metal Roof Technology

**Charlie Smith, National Recover Manager –  
Architectural Building Components (McElroy Metal)  
&  
Roger Melvin, Vice President – BuildingWorks**

# Metal Roof Insights: Seven New Things You Need To Know About

Charlie Smith  
McElroy Metal  
Roger Melvin  
BuildingWorks



# 7 Things You Need To Know About

- Galvalume Warranty
- Coastalume
- Advantages of Symmetrical Standing Seam
- Solving Insulation Problems on R/R Open Frame Buildings
- New Rigid Insulation for Open Frame Metal Building
- Structural Enhancement while Retrofitting
- Hybrid Roof System

# US Steel/Steel Dynamics Galvalume Warranty

- Increased from 25 to 45 year for bare
- Increased from 25 to 50 years for painted
- $\frac{1}{4}$ " slope minimum

# Coastalume

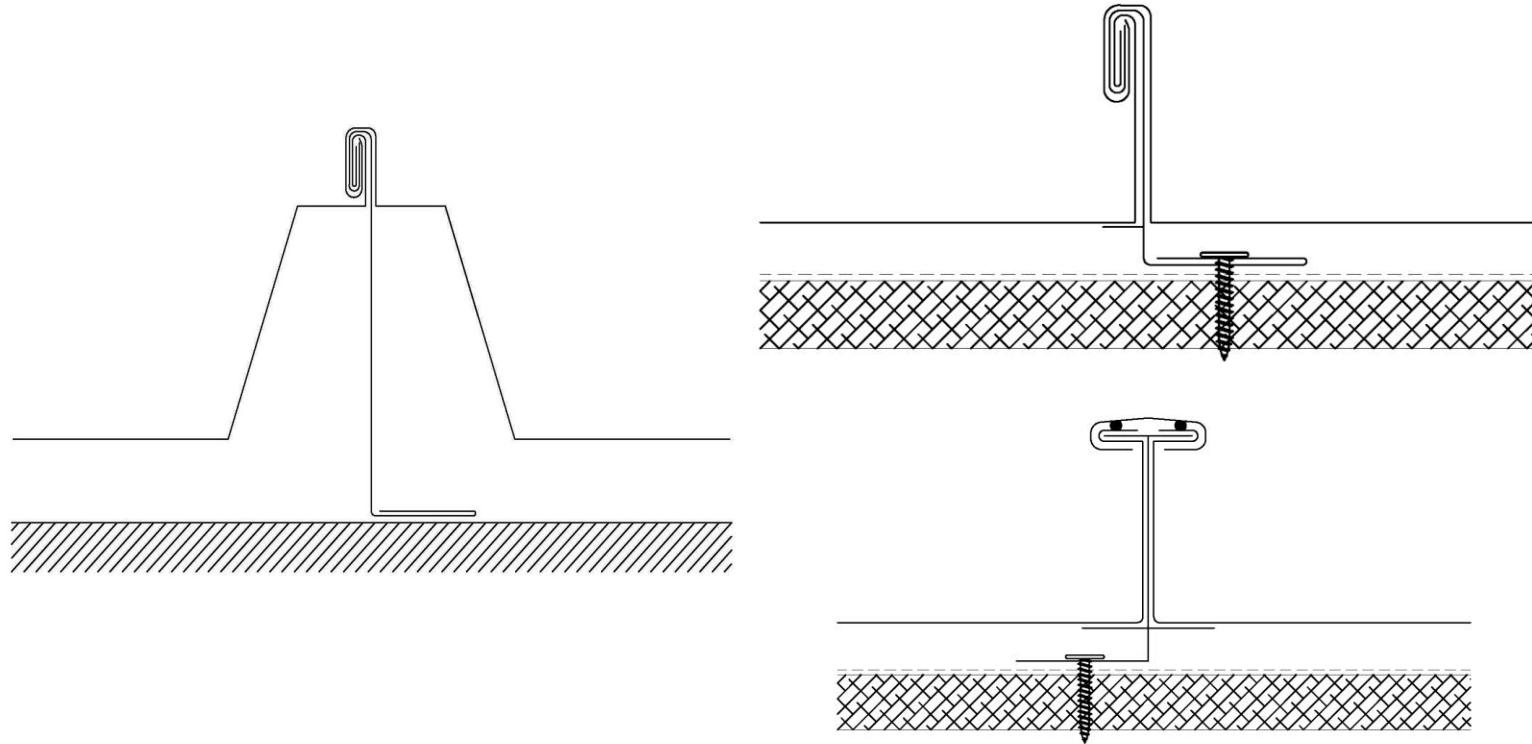
- Strength of Steel for Wind Uplift and Puncture Resistance
- US Steel AZ-60 Galvalume
- Dupont Tedlar PVF film adhered to primer
  - 50 yr film warranty-no restrictions
- 25 yr substrate warranty
  - >300 ft from breaking surf
  - Bay side/Coatal Waterways

# What Causes a Metal Roof to Fail?

- Poor Installation
- End laps
- Exposed fasteners
- Large Penetrations
- Difficult to Alter or repair after installation



# Structural Standing Seam Panels



# Symmetrical Panel Advantages

- Owner
  - No lap joints to leak
  - Most Watertight seam
  - Easy to repair or modify at a later date
  - Highest Wind uplift capacity
    - Continuous clips
    - No Additional Framing
  - Unlimited Thermal Movement
  - Easy to Curve or Taper
  - ¼" slope
- Installer
  - Seamer Runs Both Directions
  - Center Starts
  - Jump curbs
  - Less Scrap

# Individual Panel Replace ability





# Individual Panel Replace ability





# Add Curb After Roof Installed



# Continuous Clips No additional framing

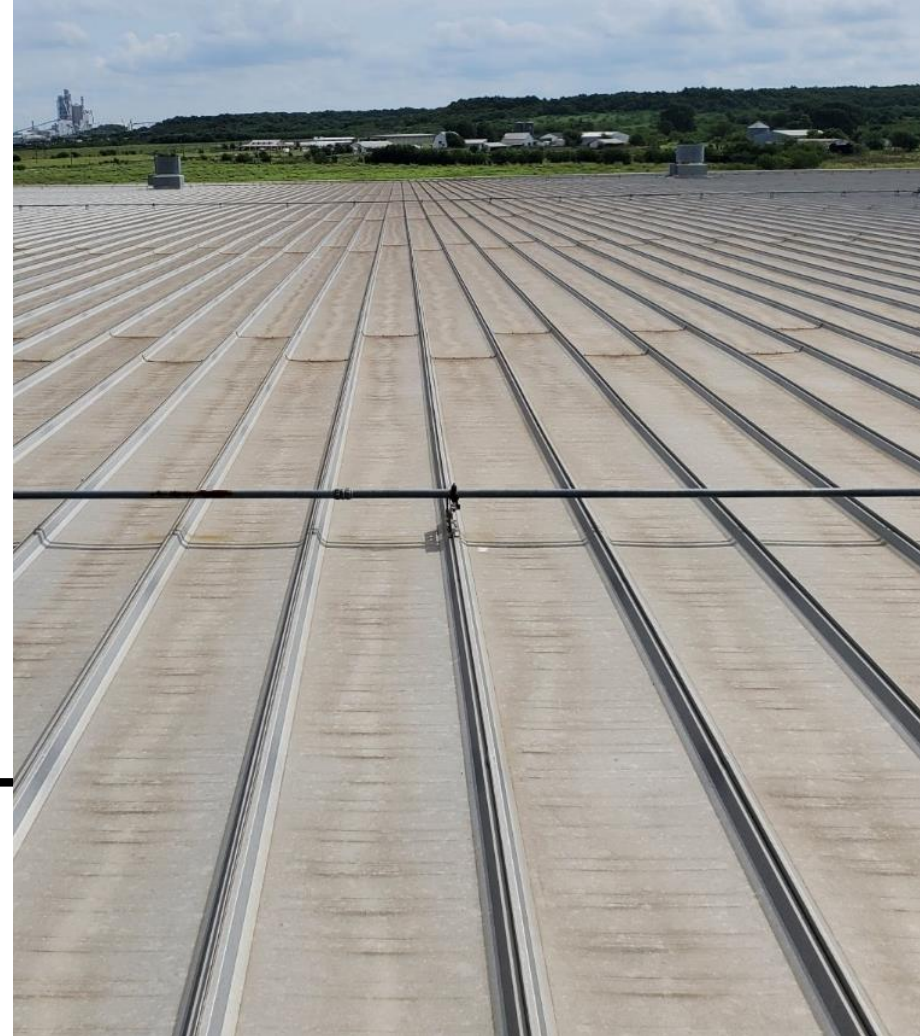




# Light Bulb Moment

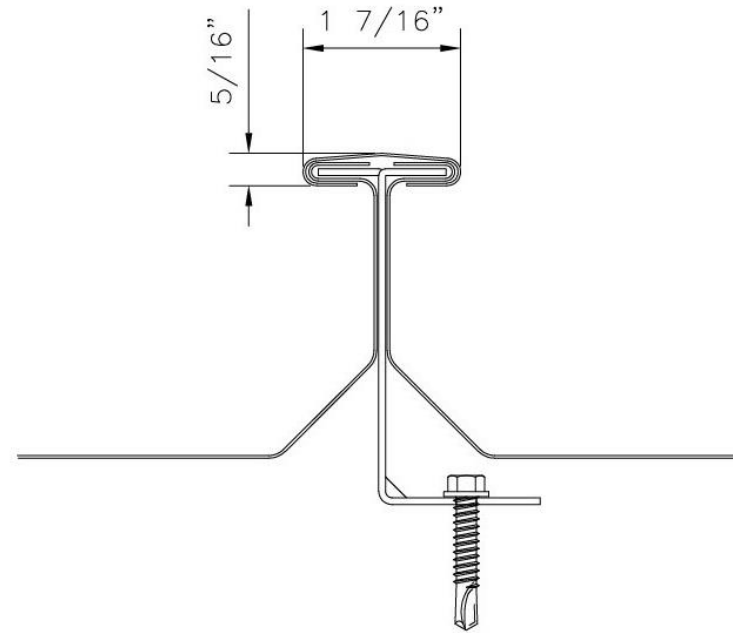


- Traditional Trapezoidal SSMR are
  - Prone to leak because of end laps
  - Very difficult to repair, alter or add curbs after installation
  - Susceptible to wind uplift
- What we need is a site formed, 3" trapezoidal panel that is easy to fix with enhanced wind uplift resistance
- Has to be made on New Tech SSQ Portable Roll Former



# New Seam Profile

- 2 ¾" tall
- 18" and 24" width
- 1 ½" wide seam
- Site formed
- ¼" slope
- Big Stiffener Ribs
- 6 clip options
- Traditional Outside closure
- Foam Inside Closure
- Attach to purlins or bar joist
- Unmatched Wind uplift with individual clips
- No Hips or Valleys





# Preliminary Testing



# Remove and Replace Roof on Metal Building

- Typical Structure with purlins 5' o.c.
- Existing R panel/Existing Standing Seam
- Have to meet
  - Current wind uplift
  - Have to meet current Snow load
  - Have to meet current energy code
    - R 30
      - 9.5" Fiberglass Batt Insulation
      - 5.2" ISO
      - 4" R Seal

# Switch to Rigid Insulation

## Remove R Panel-Add Purlins

- Big Interruption
- Remove R panel/  
Batt insulation
- Add Purlins
- 26 gauge Upside  
down U panel
- 5.2" to 6.3" iso
- High Temp Peel  
and stick





# Switch to Rigid Insulation

## Remove R Panel-Add Purlins

- Building water tight before roof panels installed
- Symmetrical SSSMR
- Bearing plates
- Individual Clips
- Long fasteners to Purlins



# Switch to Rigid Insulation

## Remove R Panel-Keep 5' purlins

- Less Interruption
- Safer
- Remove R panel/ Batt insulation
- 26 gauge Upside down U panel
- 5.2" to 6.3" iso
- High Temp Peel and stick





# Switch to Rigid Insulation

## Remove R Panel-Keep 5' purlins

- Building water tight before Roof goes down
- Symmetrical SSSMR
- Individual clips on Bearing plates
  - and/or
- Continuous Clips
- Long fasteners to Purlins



# Before Switch to Rigid Insulation On Liner





# After Switch to Rigid insulation with Liner



# Rigid Insulation for New Construction or Remove and Replace SSSMR

- Very Fast Install
  - 10,000-15,000 sf/day
- Side laps air tight and water tight
- Custom length boards
  - 25' here
- End Lap at purlin





# New Rigid Insulation for Open Framing

- Urethane Board designed to go on open purlins
- New Construction/Remove and Replace SSMR
- R Value 7.5/inch
  - Continuous with no interruptions over purlins
- 42" wide with shiplap overlap and seal flap
- Up to 53' long board
- YOU CAN WALK ON IT!
- 2 Components to install
- Air tight and water tight when installed.
- Trades can go to work inside after installed



# Inside View



# Switch to Rigid Insulation on open framing

- Building water tight before Roof goes down
- Compress construction schedule
- Roof system
  - Symmetrical SSSMR
  - Individual clips on Bearing plates and/or Continuous Clips
  - Long fasteners to Purlins



# Structural Enhancement While Retrofitting

- Roof Hugger
- Advantages
  - Lowest Profile
  - Most attachment back to structure
  - Most thoroughly tested
  - **Adds strength to underlying purlin**
- Works on
  - **Exposed Fastener panel**
  - **Low Floating standing seam**





# Low Floating Vs High Floating Standing Seam



# Structural Enhancement Modified Base Testing





# Base Testing Failure



# Roof Hugger for R Panel



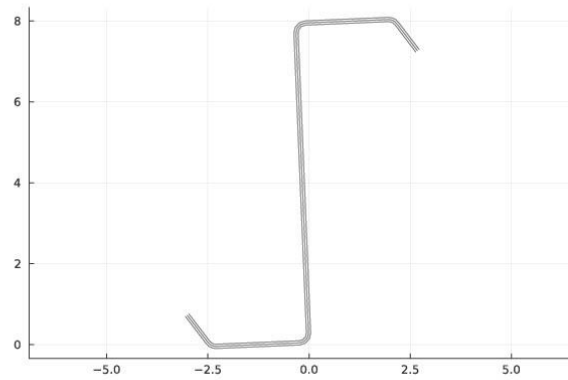


# Roof Hugger Strengthening

roof\_slope = 0.04166666666666664  
1 roof\_slope = 0.5/12

Existing roof deck type PBR 24 gauge

## Calculate existing roof system strength.



Existing roof system downward (gravity) strength = 30.4 psf

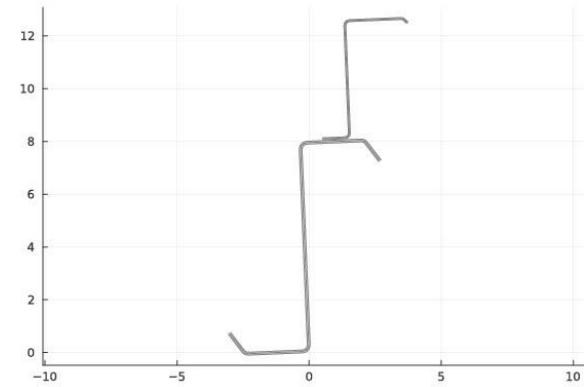
```
Model(Inputs("gravity", "AISI S100-16 ASD", [(330.0, 18.3333, 1, 1), (30.0, 5.0, 3  
1 purlin_line
```

## Add Roof Hugger framing and the new roof.

Hugger size Model C 4.5 14g

New roof deck type Vertical Rib SS 18 24 gauge

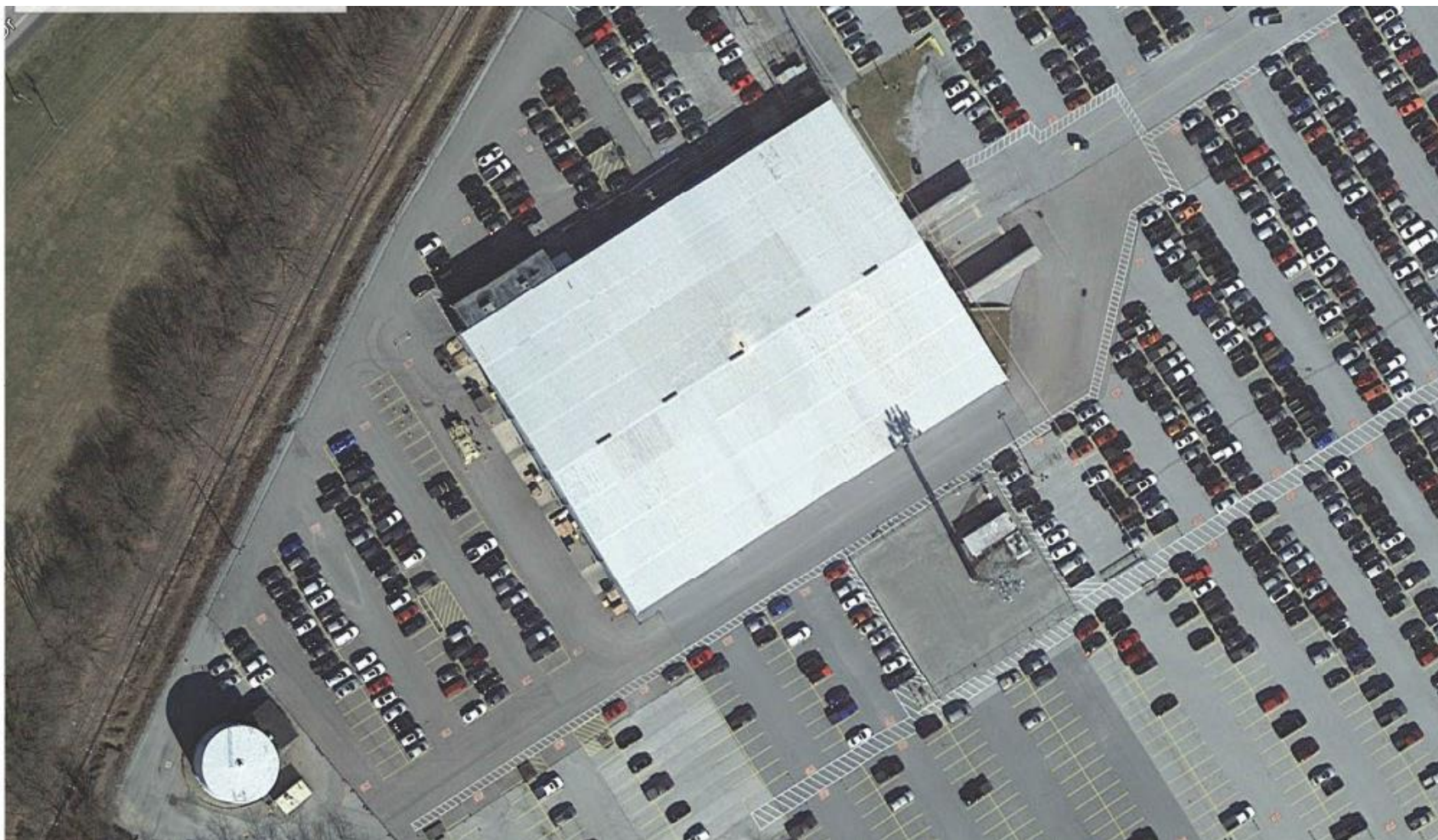
## Calculate retrofitted roof system strength.



Retrofitted roof system downward (gravity) strength = 37.5 psf

```
RoofHuggerObject(Inputs("AISI S100-16 ASD", [(330.0, 18.3333, 1, 1, 1, 1, 1), (30.0, 5.0, :  
1 roof_hugger_purlin_line
```

# Defense Contractor in PA



# Enhancement plus add R26

- 4.5" Hugger
- 16 or 14 gauge
- R 26 iso
- Peel and Stick
- Symmetrical SSSMR
- 2.7 to 3.4 psf
- Enhancement
  - Add up to 10 psf





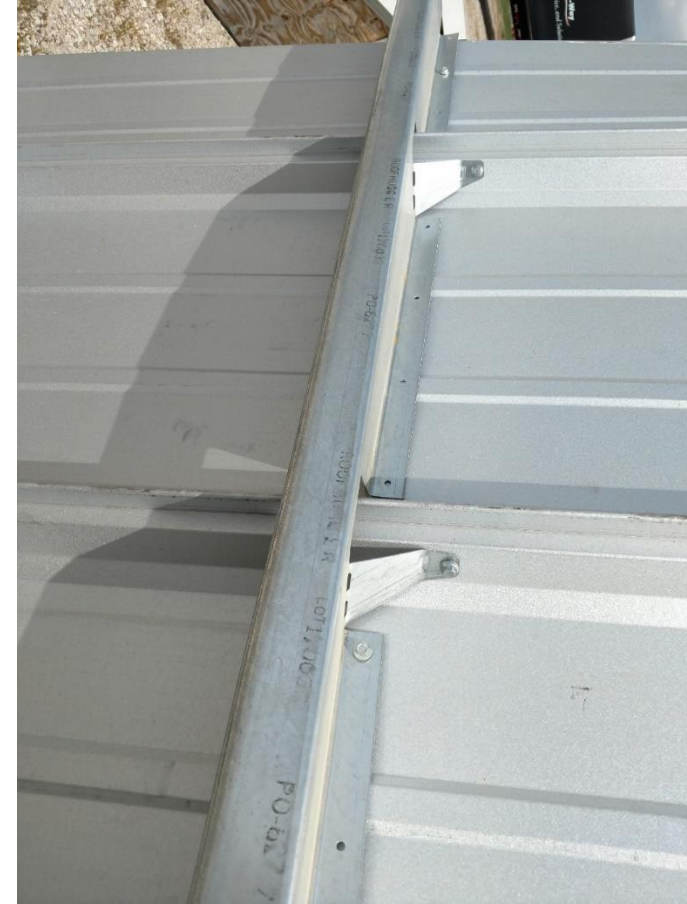
# Recover Plus Solar

- Roof hugger w/  
R26 iso/peel  
and stick
  - 2.6 psf Roof
  - 2.3 psf Solar
  - 4.9 psf Total
  - 5-12 psf  
enhancement





# Model T Roof Hugger



# Hybrid Roof System

- Using Symmetrical Standing Seam and PVC membrane to solve roofing problems with one warranty
- New Construction/Remove and Replace
  - Open purlins
  - Steel deck
- Recover existing Metal roof
- Recover single ply

# Impossible Situation





# Impossible Situation





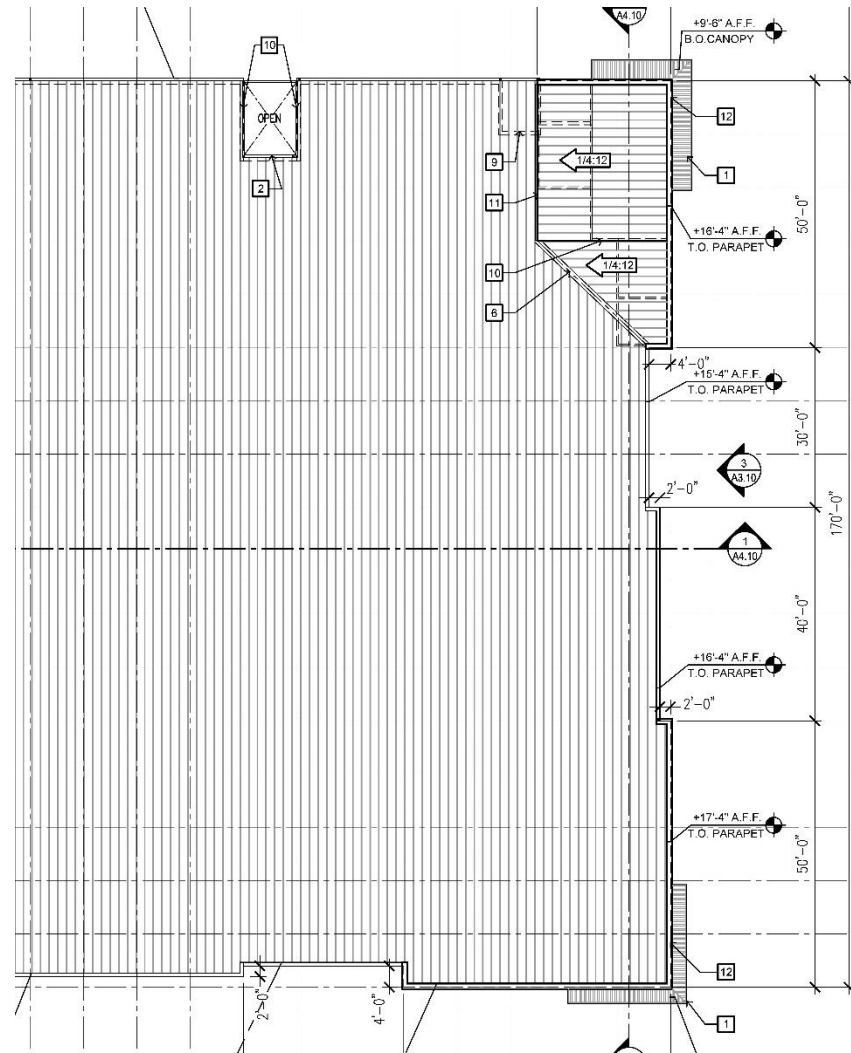
# PVC Clad Curb/Pipe Flashing



# PVC Clad Curb/Pipe Flashing

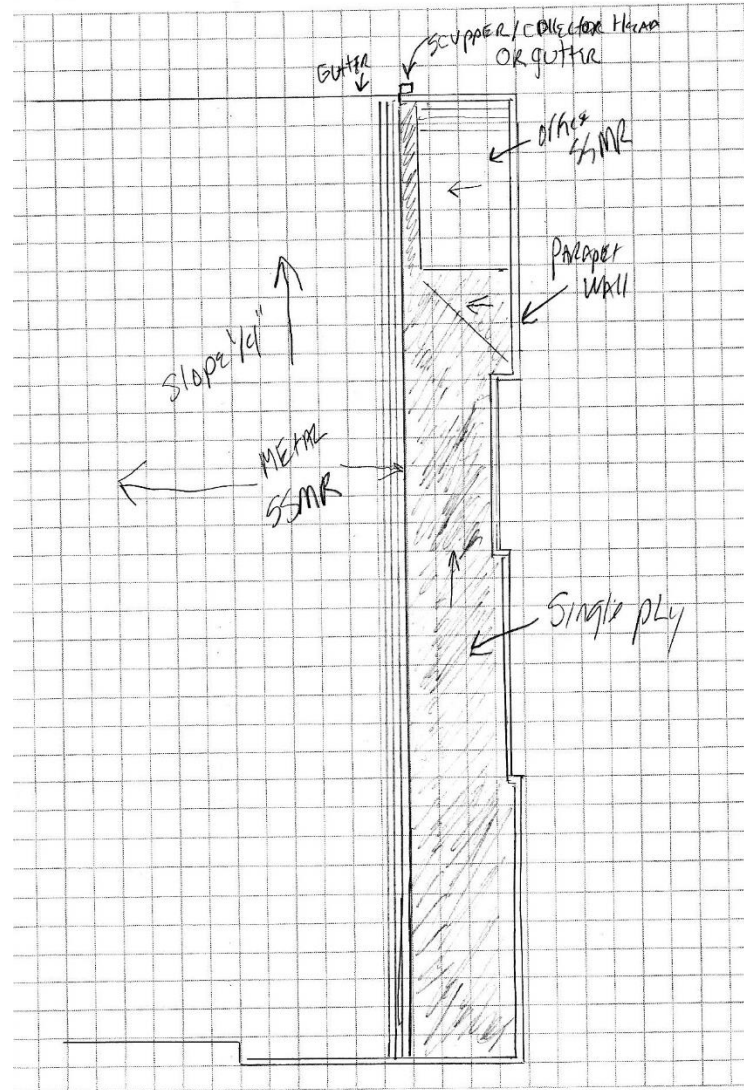


# Impossible Situation

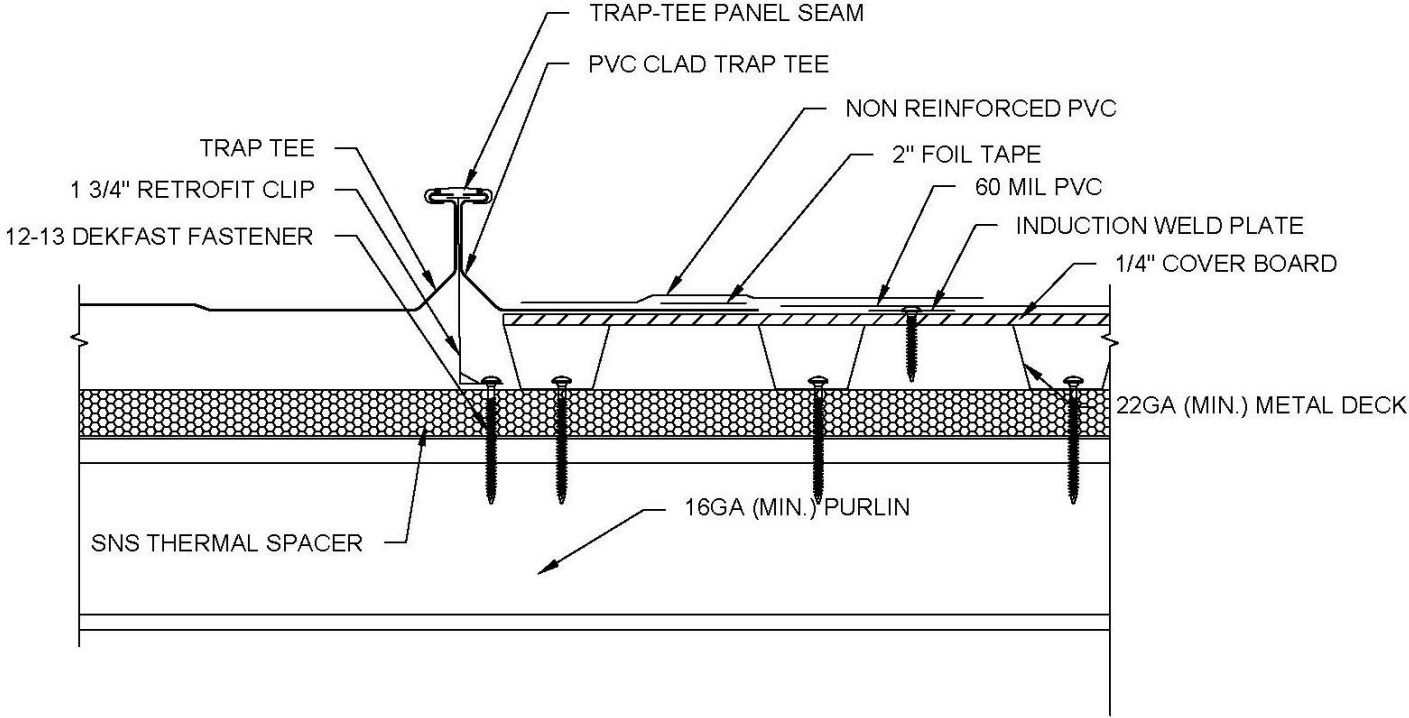




# Hybrid Solution



# Symmetrical Panel PVC Connection



# Meeting Close

- Split Kitty Drawing
- PDHs available from the Omaha Post Website
  - ▶ <https://www.same.org/omaha/resources/>