NEXSPAN2TM H SERIES SUBMITTAL PACKAGE FOR OVERHEAD MEP APPLICATIONS

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 3 Universal Clamps
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OVERVIEW & INFORMATION

Allfasteners NexSpan2™ H Series is a pre-engineered system for overhead MEP applications where heavy load capacities are required.

When it comes to challenging environments such as airports, data centers, hospitals, and waste/water treatment plants, NexSpan2™ H Series is the intersection between high load capacity and simplicity.

NexSpan2™ H Series consists of a slotted hollow structural tube design, universal beam clamps, and threaded rod, which ensure a quick, easy, and reliable support structure.



APPLICATIONS

- Airports
 - Heavy mechanical piping
 - Large HVAC ductwork
 - Industrial heating & cooling units

Data Centers

- Heavy chiller piping
- Large HVAC ductwork
- Industrial cooling equipment

Hospitals

- Large HVAC ductwork
- Chemical process piping
- Industrial heating & cooling units

Water/Waste Treatment Plants

- Pipe support stands & racks
- Supplemental Steel
- Overhead Trapeze Applications







KEY BENEFITS

- No on-site welding needed
- No need for heavy lifting equipment
- Suited for installation in challenging environments
- Assembled with impact driver or torque wrench only
- Easy to level
- Hot dip galvanized
- Engineered structural support design

- Compact packaging allows for simple transport in the back of a van
- Cost effective
- Made in the USA
- Made by AISC Certified Fabricator



Certified AISC Fabricator #22001115120RFN



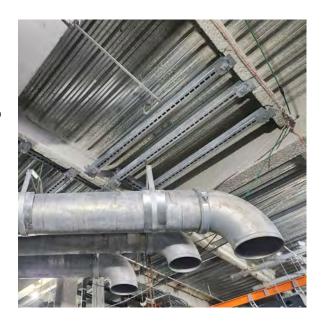
Headquarters



NOT A REPLACEMENT FOR STRUT CHANNEL

NexSpan2™ H Series superior load capacities allow it to go where strut channel cannot. The A500 grade hollow structural tube make it comparable to steel dunnage, I-beams, and double welded C-channel, and provide pre-engineered support for heavy pipework, large HVAC ductwork, HVAC units, and other suspended components.

By incorporating NexSpan2TM into your next project, you'll achieve superior results while minimizing design time, reducing welding hours on site, and avoiding the lead times associated with custom fabricated steel.





UNIVERSAL BEAM CLAMPS

The NexSpan2[™] H Series is designed for overhead applications and can be securely mounted to I-beam flanges for use as supplemental steel.

Available in three sizes, 3", 4", and 5".

WHY USE NEXSPAN2™

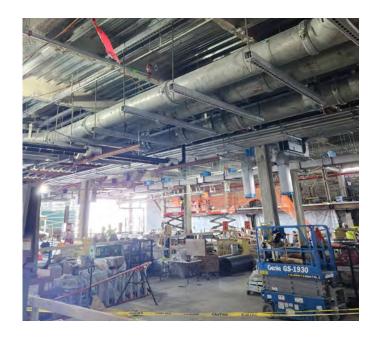
- Lightweight, reducing handling labor and reducing weight carried by building structure. Modular design allows for quick adjustments and modifications
- Slotted design allows for quick length adjustments
- Sleek profile enhances aesthetic appeal and maximizes space efficiency
- Ideal for supporting electrical and mechanical systems, HVAC units, and other suspended components
- Provides reliable and safe hanging solutions for various construction needs
- Simplifies the installation process compared to traditional steel structures



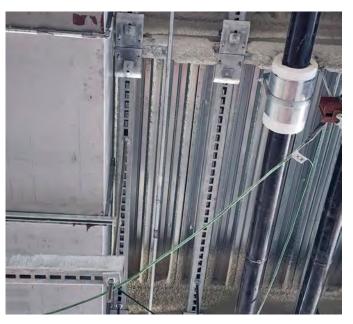


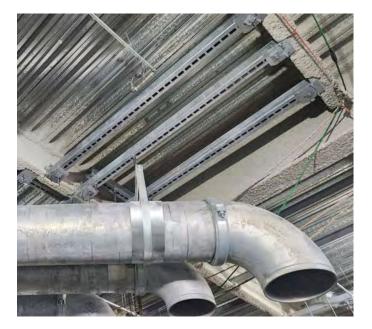








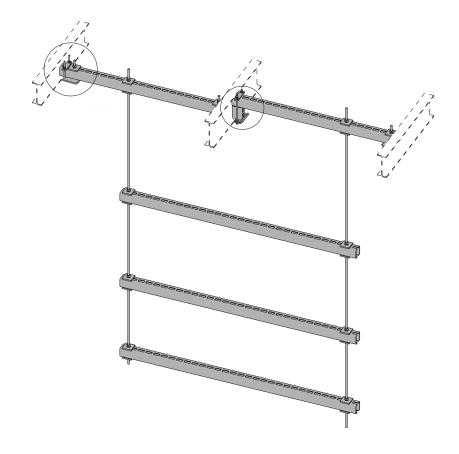




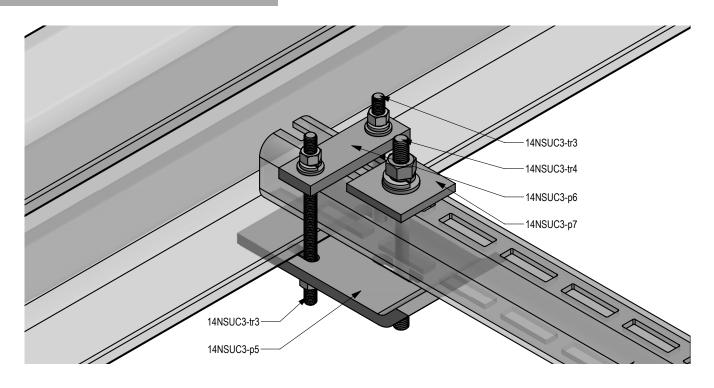


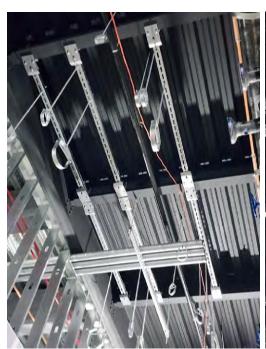








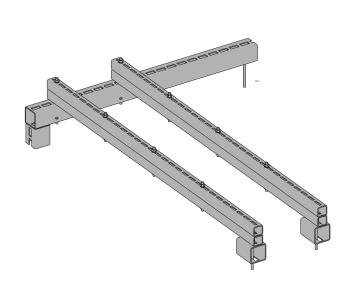




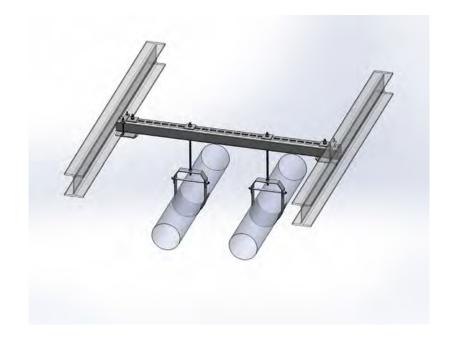






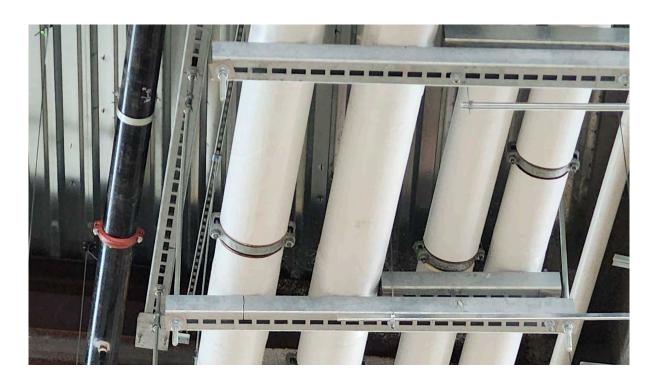










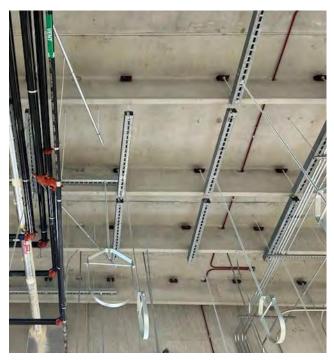


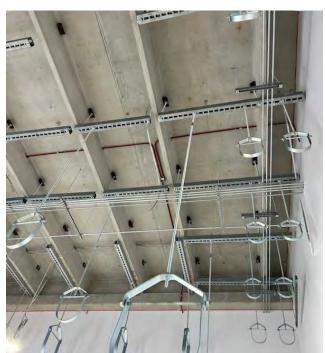
















ORDERING INFORMATION

TABLE 1: NEXSPAN2™ H SERIES ORDERING INFORMATION

| PART # | SIZE | LENGTH | SLOT WIDTH | WEIGHT PER FOOT |
|----------|--------------|--------|------------|-----------------|
| 14NSH310 | 3 x 3 x 1/4" | 10' | 0.6875" | 8.3 lb/ft |
| 14NSH410 | 4 x 4 x 1/4" | 10' | 1.250" | 11.5 lb/ft |
| 14NSH510 | 5 x 5 x 1/4" | 10' | 1.250" | 14.7 lb/ft |
| 14NSH320 | 3 x 3 x 1/4" | 20' | 0.6875" | 8.3 lb/ft |
| 14NSH420 | 4 x 4 x 1/4" | 20' | 1.250" | 11.5 lb/ft |
| 14NSH520 | 5 x 5 x 1/4" | 20' | 1.250" | 14.7 lb/ft |

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TABLE 2: NEXSPAN2™ UNIVERSAL CLAMP ORDERING INFORMATION

| PART # | SIZE | FITS PART # |
|---------|------|---------------------|
| 14NSHC3 | 3" | 14NSH310 & 14NSH320 |
| 14NSHC4 | 4" | 14NSH410 & 14NSH420 |
| 14NSHC5 | 5" | 14NSH510 & 14NSH520 |

TABLE 3: SQUARE WASHER INFORMATION

| PART # | HOLE SIZE | WIDTH | THICKNESS | ROD DIAMETER |
|--------------|-----------|-------|-----------|--------------|
| 2SW091638300 | 9/16" | 3" | 3/8" | 1/2" |
| 2SW111638300 | 11/16" | 3" | 3/8" | 5/8" |
| 2SW131612400 | 13/16" | 4" | 1/2" | 3/4" |
| 2SW111612400 | 1-1/16" | 4" | 1/2" | 1" |

TABLE 4: THREADED ROD A307 MATERIAL INFORMATION

| PART # | SIZE | COATING |
|----------|--------|-------------|
| 2TRZ1213 | 1/2-13 | Zinc Plated |
| 2TRZ5811 | 5/8-11 | Zinc Plated |
| 2TRZ3410 | 3/4-10 | Zinc Plated |
| 2TRZ0108 | 1-8 | Zinc Plated |

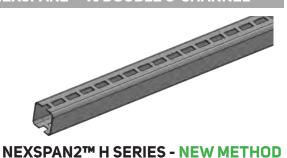
TABLE 5: HEAVY HEX NUT INFORMATION

| PART # | SIZE | WAF | HEIGHT | MATERIAL/FINISH |
|----------|--------|---------|--------|-------------------|
| 2HHN1213 | 1/2-13 | 7/8" | 31/64" | A563 Grade A Zinc |
| 2HHN5811 | 5/8-11 | 1-1/16" | 39/64" | A563 Grade A Zinc |
| 2HHN3410 | 3/4-10 | 1-1/4" | 47/64" | A563 Grade A Zinc |
| 2HHN0108 | 1-8 | 1-5/8" | 63/64" | A563 Grade A Zinc |



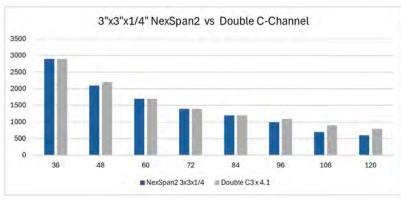


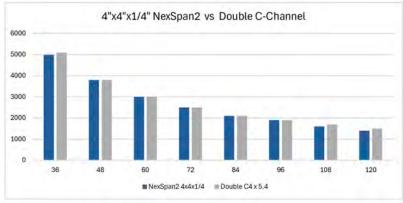
NEXSPAN2™ vs DOUBLE C-CHANNEL

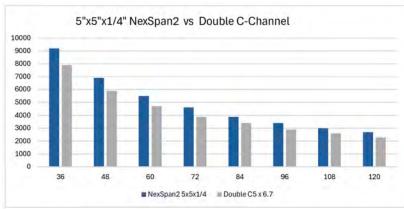




DOUBLE C-CHANNEL - TRADITIONAL METHOD









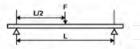
TECHNICAL SPECIFICATIONS

TABLE 6: MAXIMUM ALLOWABLE LOADS

| | NEXSPAN2™ vs DOUBLE C-CHANNEL | | | | | | |
|---------------|-------------------------------|-----------------|-----------------------------|-----------------|-----------------------------|-----------------|--|
| | MAXIMUM ALLOWABLE LOAD (lbs.) | | | | | | |
| SPAN (in.) | NEXSPAN2™ 3" x 3" x 1/4" | DOUBLE C3 x 4.1 | NEXSPAN2™ 4" x 4" x 1/4" | DOUBLE C4 x 5.4 | NEXSPAN2™ 5" x 5" x 1/4" | DOUBLE C5 x 6.7 | |
| 36 | 2900 | 2900 | 5000 | 5100 | 9200 | 7900 | |
| 48 | 2100 | 2200 | 3800 | 3800 | 6900 | 5900 | |
| 60 | 1700 | 1700 | 3000 | 3000 | 5500 | 4700 | |
| 72 | 1400 | 1400 | 2500 | 2500 | 4600 | 3900 | |
| 84 | 1200 | 1200 | 2100 | 2100 | 3900 | 3400 | |
| 96 | 1000 | 1100 | 1900 | 1900 | 3400 | 2900 | |
| 108 | 700 | 900 | 1600 | 1700 | 3000 | 2600 | |
| 120 | 600 | 800 | 1400 | 1500 | 2700 | 2300 | |

- 1. Load table is based on a simply supported beam with a concentrated load at the midspan and a minimum factor of safety of 3
- 2. Span is measured from the supports
- 3. Maximum rod size is Slot Width 1/16"
- 4. Δ < 360/L at mid-spen
- 5. HSS 3x3x1/4 compatible with rods up to 5/8"
- 6. HSS 4x4x1/4 and HSS 5x5x1/4 compatible with rods up to 1"

Case 2 - Concentrated Load at Center



TECHNICAL SPECIFICATIONS

TABLE 7: NEXSPAN2™ H SERIES TECHNICAL DATA*

| TUBE SIZE (in.) | t (in.) | t _{des} (in.) | SLOT WIDTH (in.) | A (in²) | l (in⁴) | S (in³) |
|--------------------|------------|---------------------------|---------------------|------------|------------|------------|
| 3.00 | 0.250 | 0.233 | 0.6875 | 1.800 | 2.369 | 1.579 |
| 4.00 | 0.250 | 0.233 | 1.250 | 2.205 | 5.506 | 2.753 |
| 5.00 | 0.250 | 0.233 | 1.250 | 3.135 | 12.463 | 4.985 |

ASTM A500 Gr C. Hot Dip Galvanized per ASTM A123. Slot Lengths are 2-9/16".

| | PROJECT INFORMATION | APPROVAL STAMP |
|-----------------|---------------------|-------------------|
| PROJECT: | | APPROVED |
| ADDRESS: | | APPROVED AS NOTED |
| CONTRACTOR: | | NOT APPROVED |
| ENGINEER: | | REMARKS: |
| SUBMITTAL DATE: | | |
| NOTES: | | |

NEXSPAN2TM F SERIES SUBMITTAL PACKAGE FOR MEP EQUIPMENT PLATFORMS

14 Introduction
15 T-Bolts & Slots
16-18 Application Examples
19-21 Ordering Information
22-23 Technical Specifications





OVERVIEW & INFORMATION

Allfasteners NexSpan2™ F Series is changing the game as modern contractors seek to simplify the design, fabrication, and installation of MEP equipment platforms and other steel structures.

NexSpan2 F Series' pre-engineered, modular design paired with the patent pending NexSpan2 T-Bolt and a complete range of connectors, provide an effortless framing system, eliminating the need for site welding and heavy cranes.



APPLICATIONS

Data Centers

- Floor/Roof Mounted MEP Equipment Platforms
- Walkable Ceiling Structures
- Raised Floor Structures
- Chiller Piping Stands/Racks
- Multi-Level Trapeze Supports
- Transformer Platforms
- Tank/Pump Skids

Hospitals

- Floor/Roof Mounted MEP Equipment Platforms
- HVAC Equipment Stands (VRF)
- Medical Gas Piping Stanchions

Airports

- Floor/Roof Mounted MEP Equipment Platforms
- HVAC Equipment Stands (VRF)
- Chiller Piping Stanchions

Water/Waste Treatment Plants

- Adjustable Pipe Stanchions
- Pump Stations
- Multi-Level Pipe Racks

For Installing in Challenging Environments

KEY BENEFITS

- Similar loading properties to welded steel frames
- No on-site welding needed
- Reduced need for crane work and heavy lifting equipment
- Easy adjustment/leveling
- Well suited for installation in challenging environments
- Rapidly assemble with only an impact driver or torque wrench

- Compact packaging allows for simple transport
- Cost effective compared to welding structural steel
- T-Bolts feature a slot in the shank end, indicating correct installation
- Hot Dip Galvanized
- Made in the USA







MODULAR DESIGN FOR FAST INSTALLATION

Allfasteners' NexSpan2™ F Series offers unparalleled efficiency, durability, and adaptability, making it the optimal choice for contractors operating in dynamic environments.

With its modular design, rapid installation process, and ability to support heavy loads, contractors can confidently rely on NexSpan2™ to meet the rigorous demands of modern construction projects, such as data centers, hospitals, waste/water treatment plants, and airports ensuring both quality and efficiency from start to finish.





T-BOLT & SLOTS

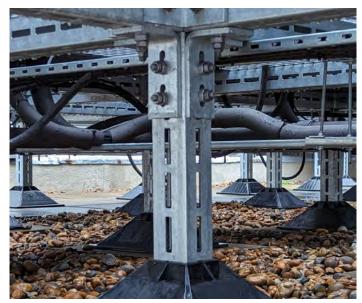
The NexSpan2™ F Series implements a unique M12 T-bolt made from 10.9 high grade steel up to 2,200 lbs load resistance. Paired with the NexSpan2's slot design, the T-bolt makes leveling frames and structures simple and fast - where traditional screw systems require precise alignment of holes.













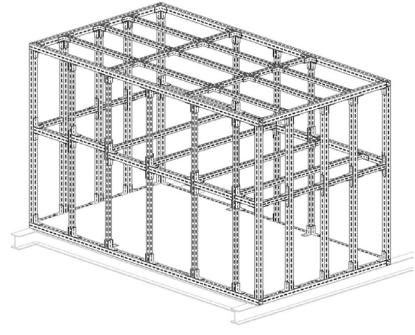




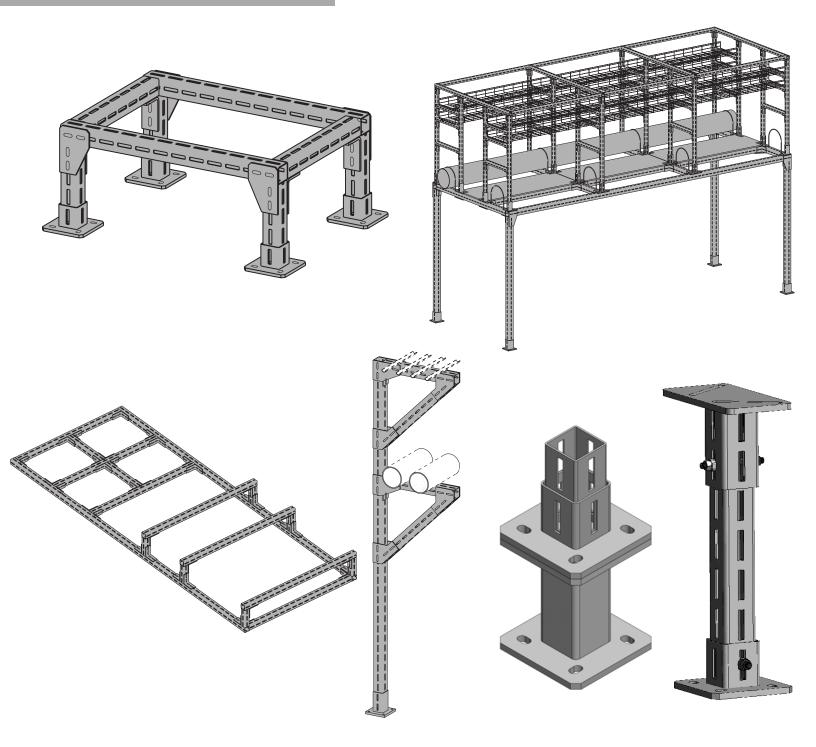
















ORDERING INFORMATION

TABLE 8: NEXSPAN2™ F SERIES ORDERING INFORMATION

| PART # | SIZE | LENGTH | SLOT WIDTH | | |
|----------|--------------|--------|------------|--|--|
| 14NSF310 | 3 x 3 x 1/8" | 10' | 0.5625" | | |
| 14NSF320 | 3 x 3 x 1/8" | 20' | 0.5625" | | |
| 14NSF410 | 4 x 4 x 1/8" | 10' | 0.5625" | | |
| 14NSF420 | 4 x 4 x 1/8" | 20' | 0.5625" | | |

TABLE 9: NEXSPAN2™ END CAP ORDERING INFORMATION

| PART # | NEXSPAN2 SIZE | FITS PART # |
|-----------|---------------|---------------------|
| 14NSF-EC3 | 3" | 14NSF310 & 14NSF320 |
| 14NSF-EC4 | 4" | 14NSF410 & 14NSF420 |

TABLE 10: NEXSPAN2™ T-BOLT ORDERING INFORMATION

| PART # | NEXSPAN2 SIZE | FITS PART # |
|----------|---|--------------|
| 2TLB1240 | M12 x 40MM T-Lock Bolt | All F Series |
| 2TLL1240 | M12 x 40MM Flat Collar Washer T-Lock Bolt | All F Series |



TABLE 11: NEXSPAN2™ SPLICE CONNECTOR ORDERING INFORMATION

| PART # | NEXSPAN2 SIZE | FITS PART # |
|-----------|---------------|---------------------|
| 14NSF-S13 | 3" | 14NSF310 & 14NSF320 |
| 14NSF-S14 | 4" | 14NSF410 & 14NSF420 |



TABLE 12: NEXSPAN2™ ANGLE ORDERING INFORMATION

| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-A63 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-A64 | 1/4" | 4" | 14NSF410 & 14NSF420 |

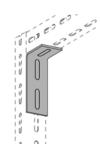
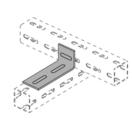


TABLE 13: NEXSPAN2™ ANGLE ORDERING INFORMATION

| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-A73 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-A74 | 1/4" | 4" | 14NSF410 & 14NSF420 |



NEXSPAN2™ F SERIES MEP EQUIPMENT PLATFORMS



ORDERING INFORMATION

TABLE 14: NEXSPAN2™ ANGLE ORDERING INFORMATION

| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-A83 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-A84 | 1/4" | 4" | 14NSF410 & 14NSF420 |



| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-A93 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-A94 | 1/4" | 4" | 14NSF410 & 14NSF420 |



| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-A03 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-A04 | 1/4" | 4" | 14NSF410 & 14NSF420 |



| PART # | BOTTOM PLATE THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|------------------------|---------------|---------------------|
| 14NSF-B13 | 5/8" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-B14 | 5/8" | 4" | 14NSF410 & 14NSF420 |



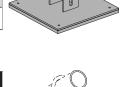
| PART # | BOTTOM PLATE THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|--------------------------|------------------------|---------------|---------------------|
| 14NSF-B23 (Default Base) | 3/8" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-B24 (Default Base) | 3/8" | 4" | 14NSF410 & 14NSF420 |



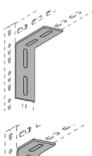
| PART # | BOTTOM PLATE THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|------------------------|---------------|---------------------|
| 14NSF-B33 | 1/4" Steel Only | 3" | 14NSF310 & 14NSF320 |
| 14NSF-B34 | 1/4" Steel Only | 4" | 14NSF410 & 14NSF420 |

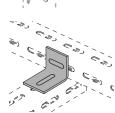
TABLE 20: NEXSPAN2™ PIPE SUPPORT BRACKET ORDERING INFORMATION

| PART # | FITS PIPE SIZE | NEXSPAN2 SIZE | FITS PART # |
|------------|---------------------|---------------|---------------------|
| 14NSF-PS13 | 1/2" to 2-1/2" Pipe | 3" | 14NSF310 & 14NSF320 |
| 14NSF-PS14 | 3" to 8" Pipe | 4" | 14NSF410 & 14NSF420 |



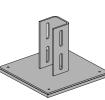


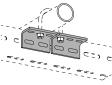
















ORDERING INFORMATION

TABLE 21: NEXSPAN2™ PIPE SUPPORT BRACKET ORDERING INFORMATION

| PART # | FITS PIPE SIZE | NEXSPAN2 SIZE | FITS PART # |
|------------|---------------------|---------------|---------------------|
| 14NSF-PS23 | 1/2" to 2-1/2" Pipe | 3" | 14NSF310 & 14NSF320 |
| 14NSF-PS24 | 3" to 8" Pipe | 4" | 14NSF410 & 14NSF420 |

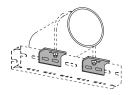


TABLE 22: NEXSPAN2™ PLATE ORDERING INFORMATION

| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-P63 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-P64 | 1/4" | 4" | 14NSF410 & 14NSF420 |

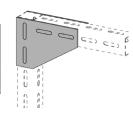


TABLE 23: NEXSPAN2™ PLATE ORDERING INFORMATION

| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-P73 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-P74 | 1/4" | 4" | 14NSF410 & 14NSF420 |

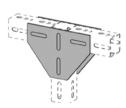


TABLE 24: NEXSPAN2™ PLATE ORDERING INFORMATION

| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-P83 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-P84 | 1/4" | 4" | 14NSF410 & 14NSF420 |

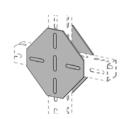


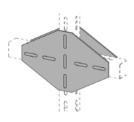
TABLE 25: NEXSPAN2™ PLATE ORDERING INFORMATION

| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-P93 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-P94 | 1/4" | 4" | 14NSF410 & 14NSF420 |



TABLE 26: NEXSPAN2™ PLATE ORDERING INFORMATION

| PART # | THICKNESS | NEXSPAN2 SIZE | FITS PART # |
|-----------|-----------|---------------|---------------------|
| 14NSF-P03 | 1/4" | 3" | 14NSF310 & 14NSF320 |
| 14NSF-P04 | 1/4" | 4" | 14NSF410 & 14NSF420 |







TECHNICAL SPECIFICATIONS

TABLE 27: MEMBER PROPERTIES

| | UNITS | 14NSF3 | 14NSF4 |
|-----------|-------|--------|--------|
| Depth | in | 3.000 | 4.000 |
| Width | in | 3.000 | 4.000 |
| Thickness | in | 0.125 | 0.125 |
| Wt/ft. | lb/ft | 4.4 | 6.0 |

TABLE 28: SLOT DIMENSIONS

| | UNITS | 14NSF3 | 14NSF4 |
|----------------|-------|----------------|----------------|
| Height x Width | in. | 9/16" x 2-3/4" | 9/16" x 2-3/4" |

TABLE 29: MATERIAL INFORMATION

| | UNITS | 14NSF3 | 14NSF4 |
|------------------------------------|-------|-----------|-----------|
| ASTM Specification | | A500 Gr B | A500 Gr B |
| Minimum Specified Yield Strength | ksi | 46 | 46 |
| Minimum Specified Tensile Strength | ksi | 58 | 58 |
| Modulus of Elasticity | ksi | 29000 | 29000 |

TABLE 30: GROSS SECTION PROPERTIES

| | UNITS | 14NSF3 | 14NSF4 |
|--------------------|-----------------|--------|--------|
| Design Thickness | in | 0.116 | 0.116 |
| Area | in ² | 1.300 | 1.770 |
| Moment of Inertia | in ⁴ | 1.780 | 4.400 |
| Radius of Gyration | in | 1.170 | 1.580 |

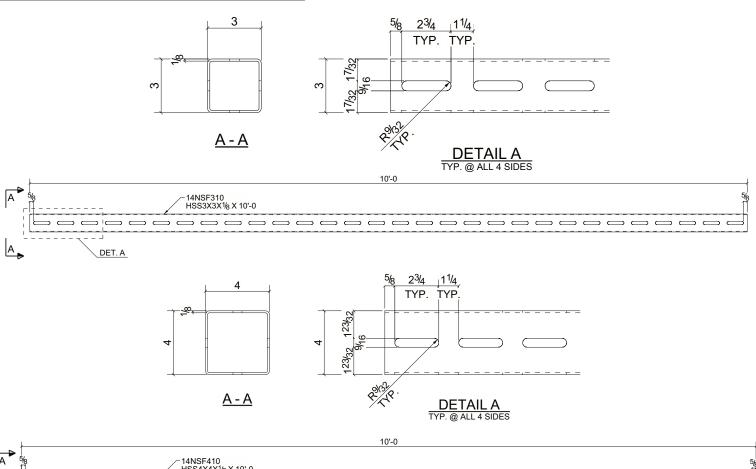
TABLE 31: EFFECTIVE SECTION PROPERTIES

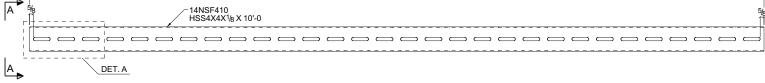
| | UNITS | 14NSF3 | 14NSF4 |
|------------------------------|-----------------|--------|--------|
| Effective Area | in ² | 1.043 | 1.506 |
| Effective Web Area | in ² | 0.458 | 0.689 |
| Effective Moment of Inertia | in ⁴ | 1.507 | 3.903 |
| Effective Section Modulus | in ³ | 1.005 | 1.952 |
| Effective Radius of Gyration | in | 1.203 | 1.610 |





TECHNICAL SPECIFICATIONS





Selection of the product for adequacy should be made by individuals with knowledge of the intended application, locations, loadings, specifications and requirements of the project.

| | PROJECT INFORMATION | APPROVAL STAMP |
|-----------------|---------------------|-------------------|
| PROJECT: | | APPROVED |
| ADDRESS: | | APPROVED AS NOTED |
| CONTRACTOR: | | NOT APPROVED |
| ENGINEER: | | REMARKS: |
| SUBMITTAL DATE: | | |
| NOTES: | | |
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