



**STRONGER  
THAN STEEL.™**



INTEGRATED FIRE STOP SYSTEMS

## BlazeFrame Design Advantages

### What is BlazeFrame?

BlazeFrame products are innovative steel framing profile/intumescent composites, that combine ease of installation, inspection, life safety and joint protection dependability into one unique product.

### How does it work?

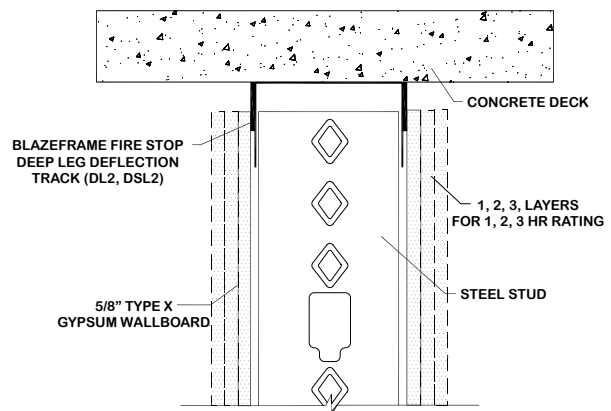
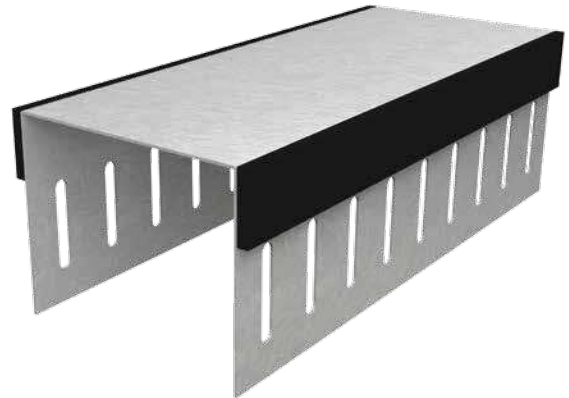
Using a cured factory metered dosage intumescent material, BlazeFrame profiles provide fire stopping, smoke and sound dampening that is effective immediately after framing components are installed. When exposed to heat above 375° F, the intumescent material expands up to 35 times its size. This provides additional protection from heat and flame passage during a fire event.

### What does it replace?

BlazeFrame's factory metered dosage intumescent material eliminates elastomeric fire proofing caulks and spray. The cured intumescent tape eliminates VOC's and off gases associated with caulked spray fire proofing. With the intumescent tape factory applied it eliminates both overage and underage often associated with the messy caulks and sprays.

### BlazeFrame Advantages:

- Installed & inspected as "joint framing" (before obstructions)
- Unaffected by dirty, oily, wet or freezing conditions
- Cured intumescent effective immediately (no VOC)
- No fatigue to joint or substrate materials for life of assembly



One to three hour assembly



### Fire Stopping

- UL 2079 Classified and listed for up to 3 hr assemblies
- Protection for up to 3" overall movement capability (1-1/2" up and 1-1/2" down)
- Eliminates fire proofing caulks and sprays
- Shaftwall Assemblies certified for use with all UL listed "liner" boards and finish side gypsum products

### Sound Dampening

- NVLAP certified to provide up to STC 62 (based on wall assembly)
- Open unencumbered joints (no caulk required)
- Fluted deck exposed with only BlazeFrame Deck Plug or Flute Cover STC = 50+

### Smoke barrier-air leakage - IBC 2009

BlazeFrame assemblies have been UL Classified with the lowest possible L-Rating (less than 1 CFM/lft).

### Seismic Requirements

BlazeFrame is UL 2079 Classified for Class III Cycling of 500 cycles at 30 cycles per minute of vertical movement which may be capable of meeting seismic design and building code requirements.

### Code Compliance

BlazeFrame joint protection complies with up to date building codes and is listed by Underwriters Laboratories Inc.

UL 2079

ASTM E-1966

ASTM E-814

ULC S115

ASTM E-119

ASTM E-2837

Tests for Fire Resistance of Building Joint Systems

Standard Test Method for Fire Resistive Joint Systems

Standard Method of Fire Tests of Fire Stop Systems

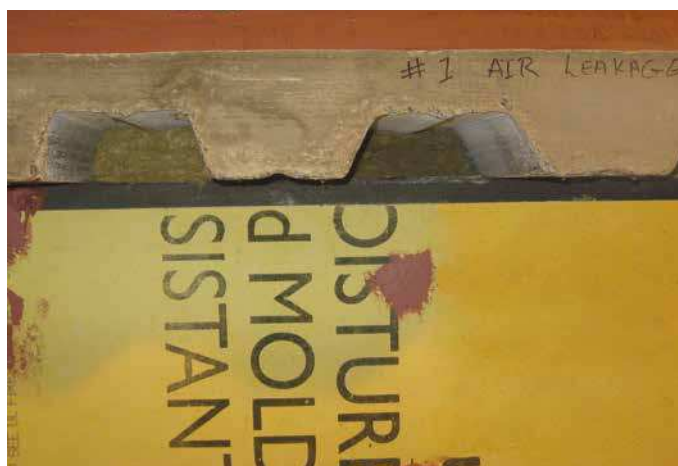
Standard Method of Fire Tests of Fire Stop Systems

Evaluation of a Non-Load Bearing Wall Assembly with FAS-093X Control Joint

Rated Wall Assemblies Installed to Non-Rated Assemblies (pending)



Expanded intumescent strip after fire test

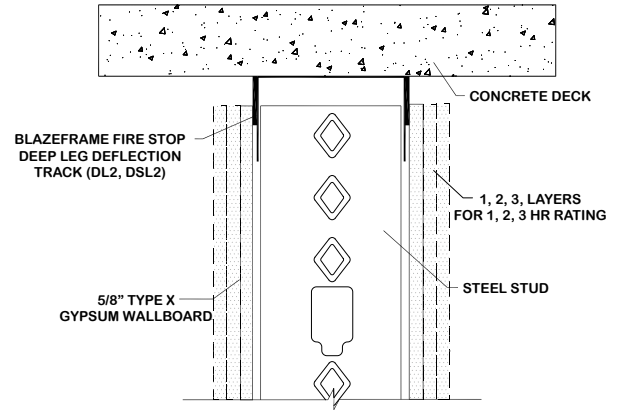


BlazeFrame deflection track & deck plugs in sound test



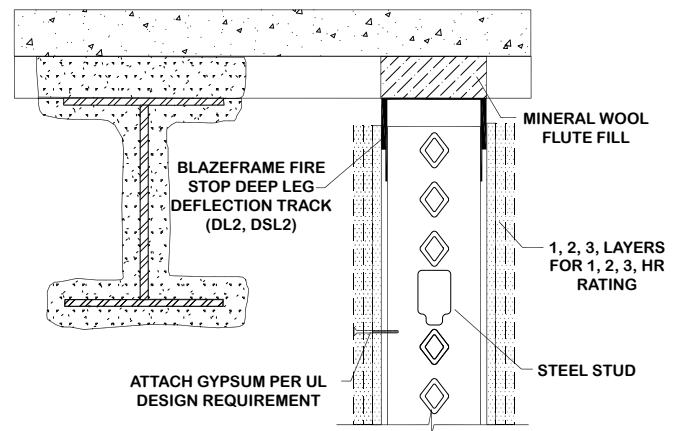
## BlazeFrame Design Advantages

### CONCRETE DECK CONDITION



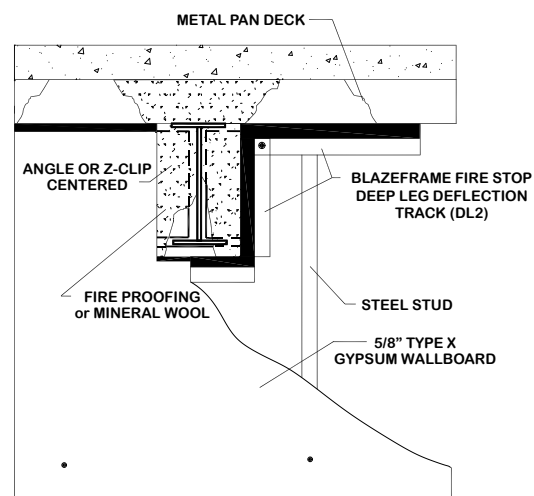
- Clean transition from wall sheathing to substrate.
- Exposed and finished joints are fire and sound rated.

### METAL DECK CONDITION



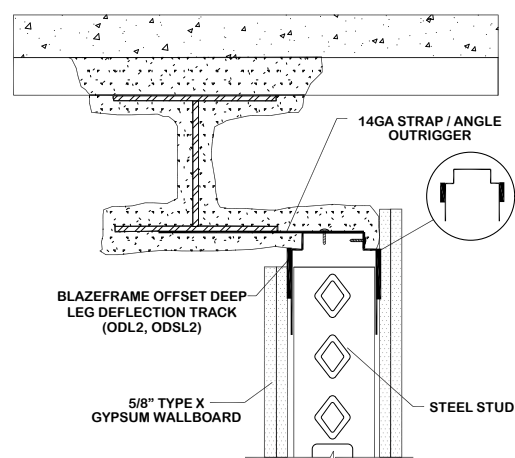
- Head of Wall assembly complete before studs are installed.
- Mineral wool only needed for flute fill.
- Earlier, easier, and accurate inspection.

## BEAM PENETRATION CONDITION



- Eliminates contour cutting of wall sheathing, caulks/sprays.
- Spray fire proofing or mineral wool are the easy option for beam cavity fill.

## PARALLEL OFFSET CONDITION



- Eliminates z-clips, lath basket, voids in fire proofing.
- 14 ga angle outrigger/profile preassembled prior to installation.

## BlazeFrame Sample Profiles

### DSL 2 (DEEP LEG - SLOTTED BOTH SIDES)

#### Profile with two slotted legs w/ fire stop on both sides

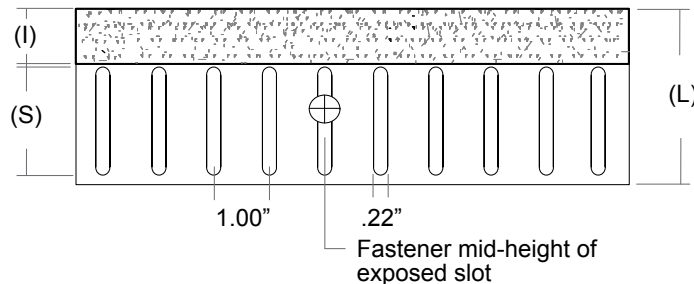
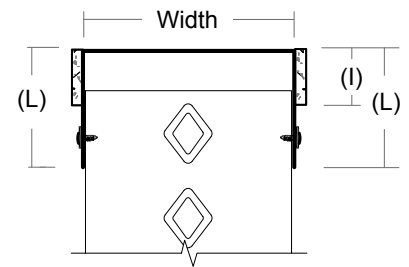
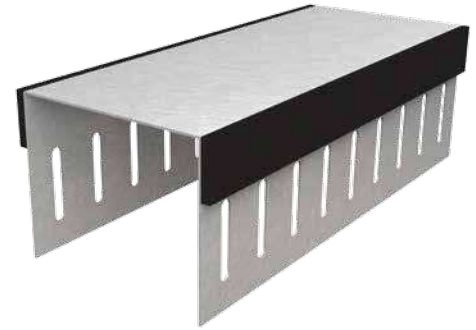
Composite Fire Stop/Framing for use in fire rated wall assemblies. Provides 100% unencumbered joint protection. Accommodates up to 1 1/2" overall movement with UL 2079 Level III Certification. Minimum CP60 coating. Legs with slots spaced 1" o.c. for positive attachment of studs per listed assemblies in UL Fire Resistance Directory.

Widths: 2-1/2", 3-5/8", 4", 6" and 8"

Thicknesses: 33mils (20ga), 43mils (18ga) and 54mils (16ga)  
DSLE 30mils

Profile	Leg Length (L)	Tape Width (I)	Slot Height (S)	Joint Protection
DSLE 2	2.50"	0.75"	1.50"	0.50"
DSL 2	3.00"	1.00"	1.50"	0.75"
DSLW 2	3.00"	1.25"	1.50"	1.00"
DSLX 2	4.00" *	1.75"	2.00"	1.50"

\* 4" leg length is not available for 2-1/2" wide system



### SL 1 (DEEP LEG - SLOTTED ONE SIDE)

#### Profile with one slotted leg and one solid leg w/ fire stop on slotted side

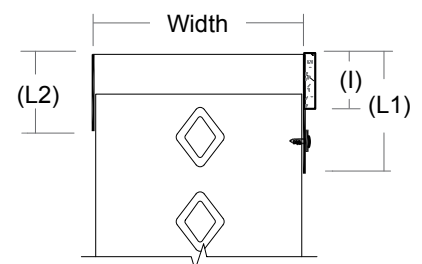
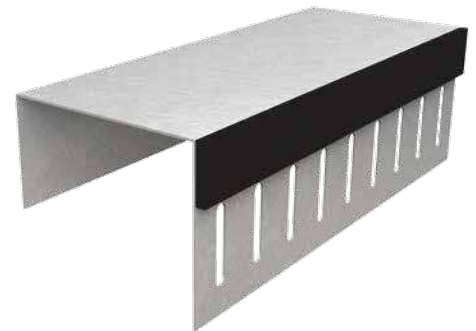
Composite Fire Stop/Framing for use in fire rated wall assemblies. Provides 100% unencumbered joint protection. Accommodates up to 1 1/2" overall movement with UL 2079 Level III Certification. Minimum CP60 coating. One leg with slots spaced 1" o.c. for positive attachment of studs per listed assemblies in UL Fire Resistance Directory.

Widths: 2-1/2", 3-5/8", 4", 6" and 8"

Thicknesses: 33mils (20ga), 43mils (18ga) and 54mils (16ga)

Profile	Slotted Leg Length (L1)	Solid Leg Length (L2)	Tape Width (I)	Slot Height (S)	Joint Protection
SL 1	3.00"	2.00"	1.00"	1.50"	0.75"
SLW 1	3.00"	2.00"	1.25"	1.50"	1.00"
SLX 1	4.00" *	2.50"	1.75"	2.00"	1.50"

\* 4" leg length is not available for 2-1/2" wide system



## DL (DEEP LEG - SOLID)

Composite Fire Stop/Framing for use in fire rated wall assemblies. Provides 100% unencumbered joint protection. Accommodates up to 3" overall movement with UL 2079 Level III Certification. Minimum CP60 coating. Two solid legs supporting "free floating" studs per listed assemblies in UL Fire Resistance Directory.

Widths: 2-1/2", 3-5/8", 4", 6" and 8"  
 Thicknesses: 33mils (20ga), 43mils (18ga) and 54mils (16ga)  
 DLE 30mils

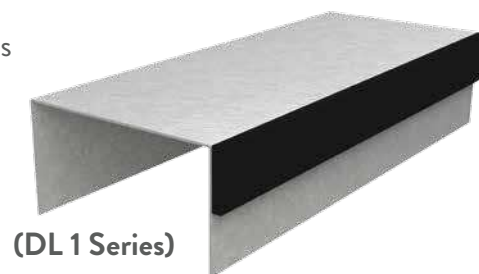
**(DL 1 Series) Profile with two solid legs w/ fire stop on one side**

**(DL 2 Series) Profile with two solid legs w/ fire stop on both sides**

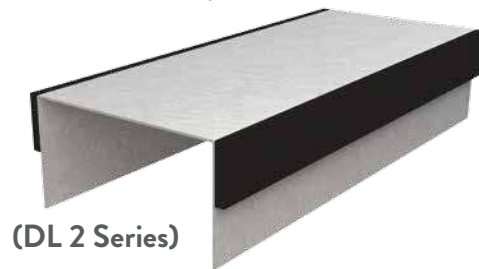
Profile	Leg Length (L)	Tape Width (I)	Joint Protection
DLE	2.00"	0.75"	0.50"
DL	2.00"	1.00"	0.75"
DLW	2.00"	1.25"	1.00"
DLX	2.50"	1.75"	1.50"
DLZ	3.00"	2.25"	2.00"
DLY	4.00" *	3.25"	3.00"

\* 4" leg length is not available for 2-1/2" wide system

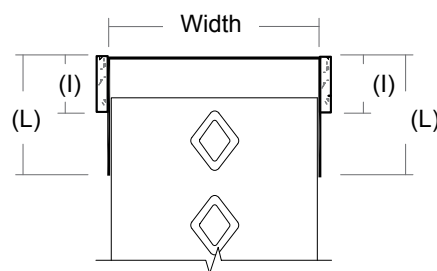
\* Additional sizes available.



(DL 1 Series)



(DL 2 Series)



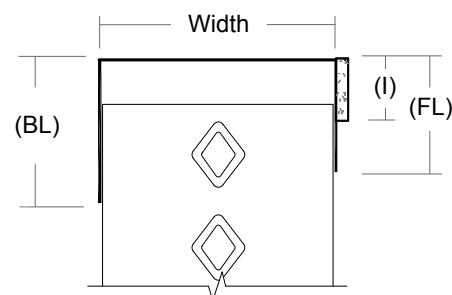
## JR (J-RUNNER)

**Profile with two solid legs w/ fire stop on one side**

Composite Fire Stop/Framing for use in up to 3 hr fire rated shaft wall assemblies. Provides 100% unencumbered joint protection. Accommodates up to 1 1/2" overall movement with UL 2079 Level III Certification. Minimum CP60 coating. One leg (front) having intumescent per listed assemblies in UL Fire Resistance Directory.

Widths: 2-1/2", 4" and 6"  
 Thicknesses: 33mils (20ga), 43mils (18ga) and 54mils (16ga)

Profile	Front Leg Length (FL)	Back Leg Length (BL)	Tape Width (I)	Joint Protection
JR 1	2.00"	3.00"	1.00"	0.75"
JRW 1	2.00"	3.00"	1.25"	1.00"
JRX 1	2.00"	3.00"	1.75"	1.50"



## ODL 2 (OFFSET DEEP LEG)

### Profile with two solid legs w/ fire stop on both sides

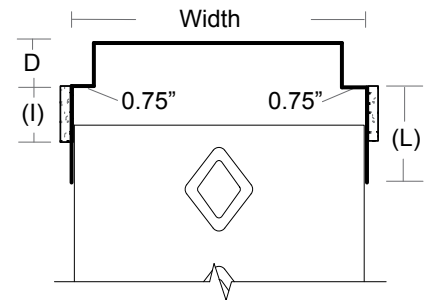
Composite Fire Stop/Framing with "offset step" accommodates various depths of fireproofing in head of wall and wall to wall (column) assemblies. (Other offset depths available to accommodate other sprayed thicknesses). Provides 100% unencumbered joint protection. Accommodates up to 2" overall movement with UL 2079 Level III Certification. Minimum CP60 coating. Two solid legs per listed assemblies in UL Fire Resistance Directory.

Widths: 3-5/8", 4", 6" and 8"

Thicknesses: 33mils (20ga), 43mils (18ga) and 54mils (16ga)

"D" Dimension: Varies with depth of fire stop material required.

Profile	Lower Leg Length (L)	Tape Width (I)	Joint Protection
ODL 2	2.00"	1.00"	0.75"
ODLW 2	2.00"	1.25"	1.00"
ODLX 2	2.50"	1.75"	1.50"
ODLZ 2	3.00"	2.25"	2.00"



## ODSL 2 (OFFSET DEEP SLOTTED LEG)

### Profile with two slotted lower legs w/ fire stop on both sides

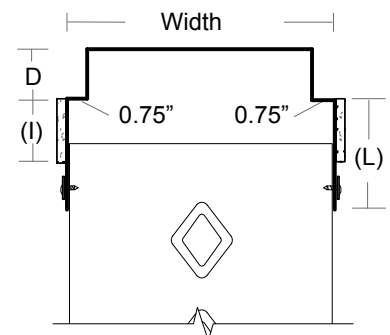
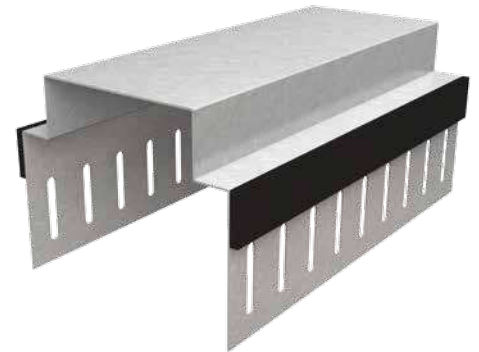
Composite Fire Stop/Framing with "offset step" accommodates various depths of fireproofing in head of wall and wall to wall (column) assemblies. (Other offset depths available to accommodate other sprayed thicknesses). Provides 100% unencumbered joint protection. Accommodates up to 1-1/2" overall movement with UL 2079 Level III Certification. Minimum CP60 coating. Two legs with slots spaced 1" o.c. for positive attachment of studs per listed assemblies in UL Fire Resistance Directory.

Widths: 3-5/8", 4", 6" and 8"

Thicknesses: 33mils (20ga), 43mils (18ga) and 54mils (16ga)

"D" Dimension: Varies with depth of fire stop material required.

Profile	Lower Leg Length (L)	Tape Width (I)	Slot Height (S)	Joint Protection
ODSL 2	3.00"	1.00"	1.50"	0.75"
ODSLW 2	3.00"	1.25"	1.50"	1.00"
ODSLX 2	4.00"	1.75"	2.00"	1.50"



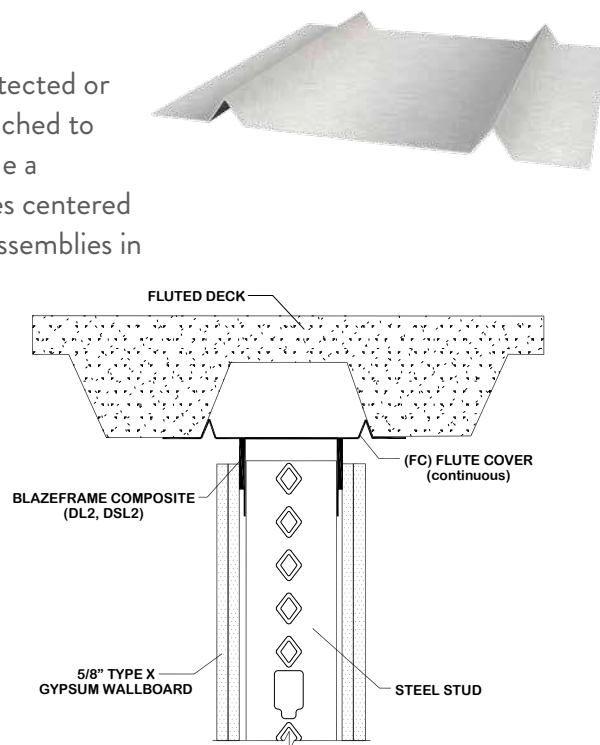
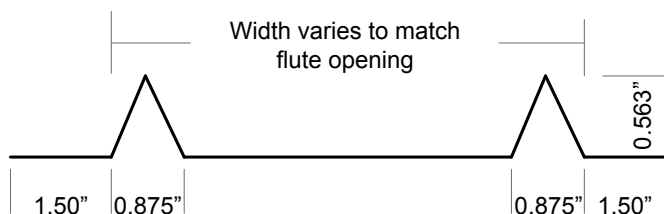


## FC (FLUTE COVER)

### Profile strap for under fluted decks

Corrugated strap for horizontal use to span fluted areas of unprotected or protected metal decks in up to 2 hr rated assemblies. Profile attached to deck "valley" surfaces a max 16" o.c. on both sides. Profiles provide a surface area for attachment of head of wall partition track profiles centered or offset underneath and parallel to deck fluted areas per listed assemblies in UL Fire Resistance Directory.

Sizes: 675 (6-3/4") or 700 (7")  
 Length: 10'-0"  
 Thicknesses: 33mils (20ga)

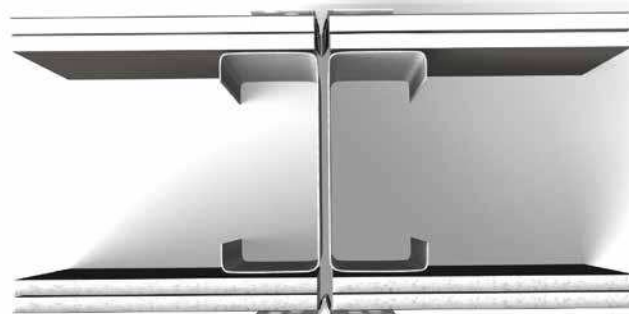
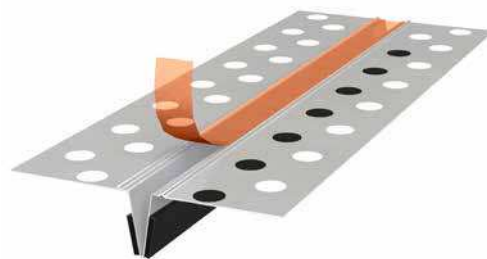


## FAS-093X FIRE RATED CONTROL JOINT

### Profile for protection of control joints

A composite control joint with intumescent tape factory applied to the back side of the control joint. The FAS-093X has been tested according to UL-2079 "Test For Fire Resistance of Building Joint Systems" and is used to relieve stresses of expansion and contraction of drywall interior partitions or ceilings running in a horizontal or vertical direction. The opening is protected by an orange plastic tape to indicate the fire rating this tape is removed after joint compound has been applied and the finish is completed. The section is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003.

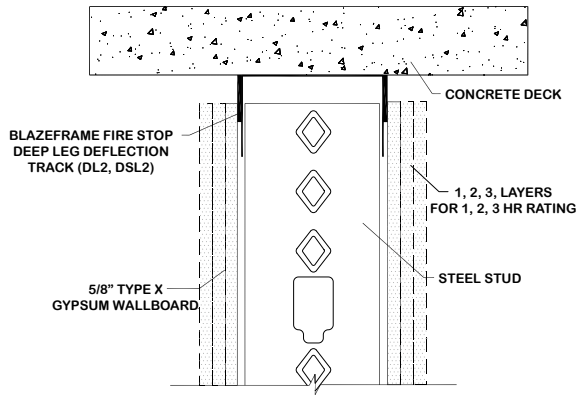
Width: 2"  
 Length: 10'-0"  
 Thicknesses: 13mils  
 Packaging: 20 Pcs./Ctn. - 24 Ctn. per pallet



## BlazeFrame Sample Details

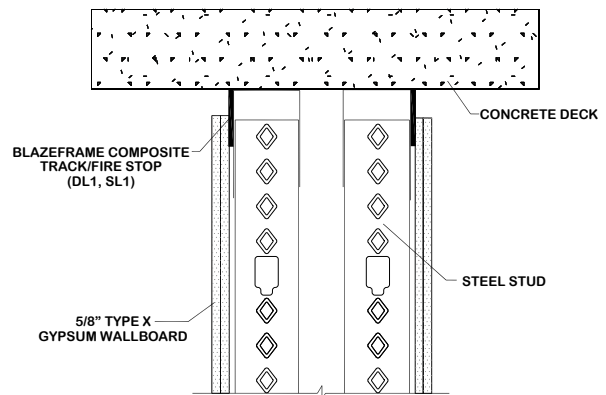
### Post Tension or Structural Concrete Overhead

PT-1

 HW-D-0498


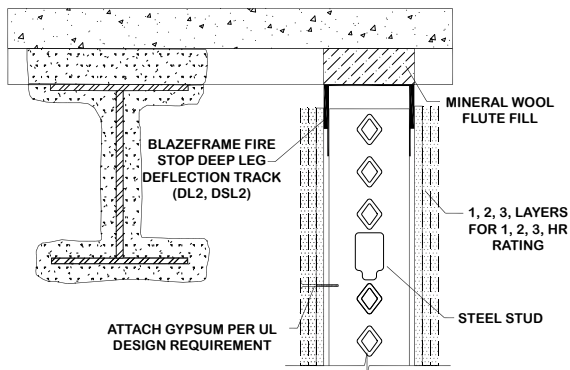
### Chase Wall Post Tension or Structural Flat Concrete

PT-2

 HW-D-0505


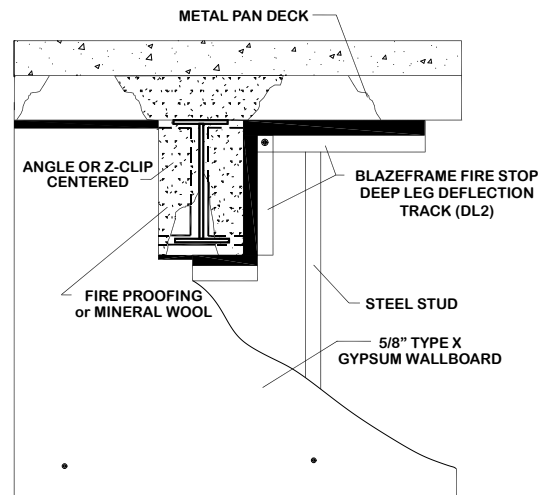
### Perpendicular Unprotected Deck (UD) – Mineral Wool Fill

UD-1

 HW-D-0513


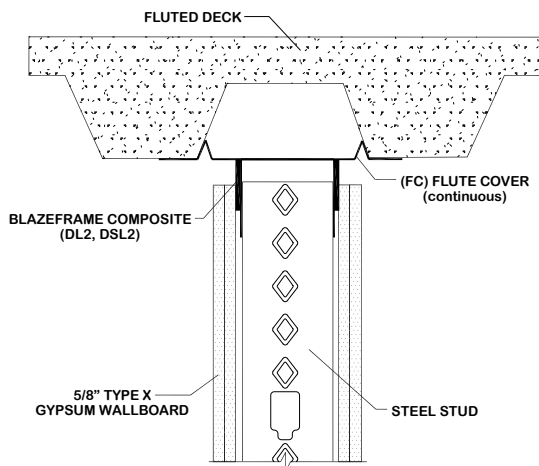
### Head of Wall Beam Penetration

SS-1

 HW-D-0495


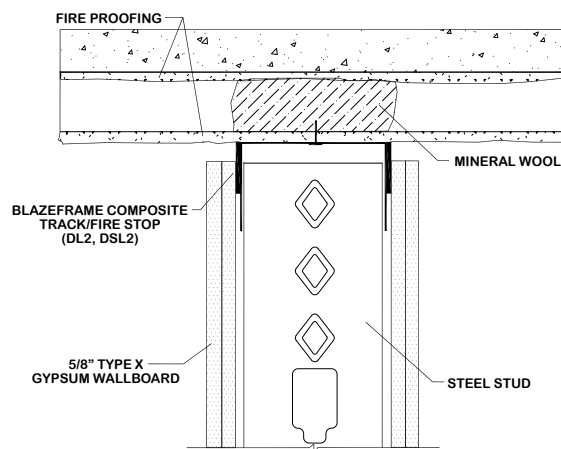
## Centered Under Flute Unprotected Deck (UD) – Flute Cover

UD-6  
UL CLASSIFIED  
HW-D-0544



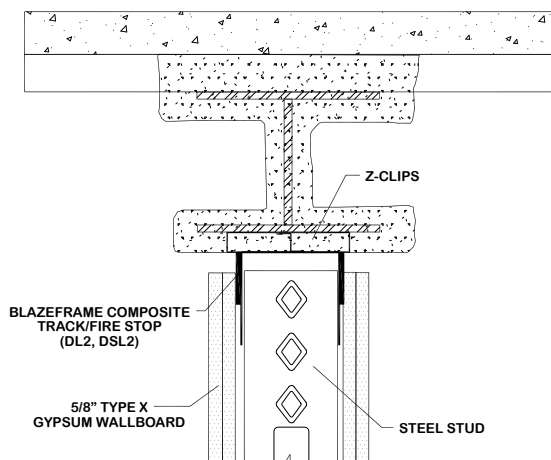
## Perpendicular Protected Deck (PD) – Mineral Wool Flute Fill

PD-12  
UL CLASSIFIED  
HW-D-0513



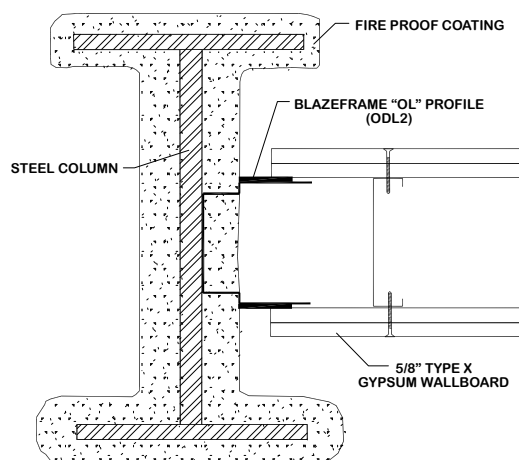
## Parallel Under Structural Support (Z-Clips)

SS-16  
UL CLASSIFIED  
HW-D-0502



## Wall to Wall Gypsum to Protected Steel (I-Beam)

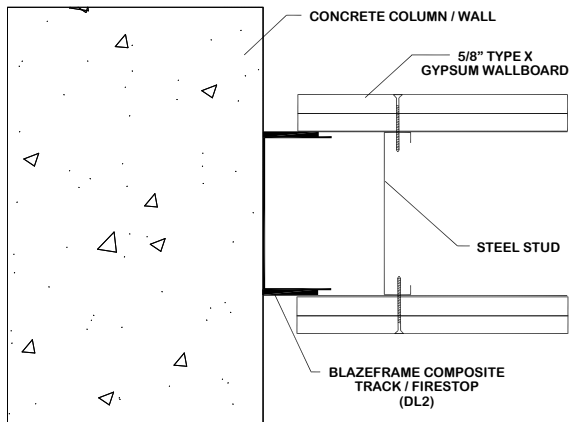
VM-3  
Design Based on UL CLASSIFIED  
WW-S-0055  
HW-D-0558



## BlazeFrame Sample Details

### Wall to Wall Gypsum to Concrete Column/Wall

VM-1

 WW-S-0055


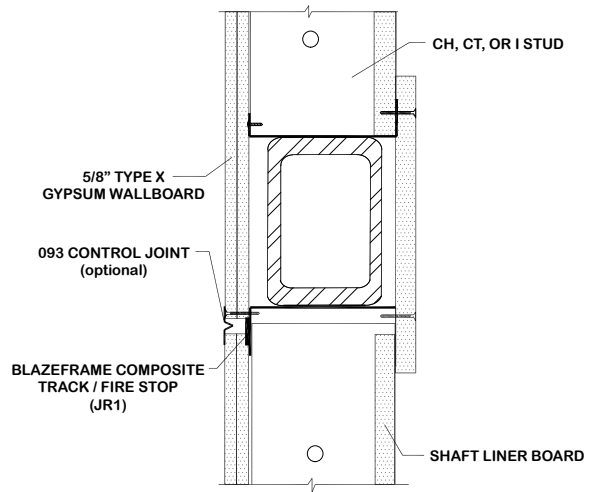
### Hollow Steel Shape - Non Rated

SS-21

Design Based on 

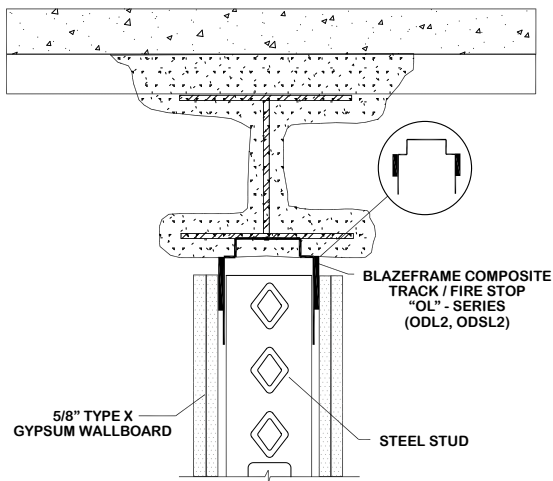
HW-D-0543

HW-D-0559



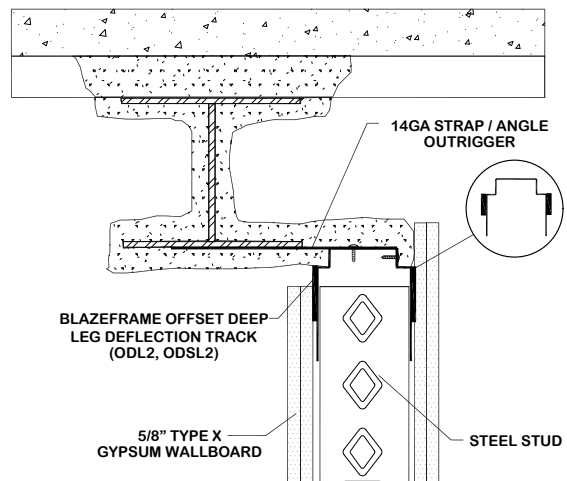
### Parallel Under Structural Support (Offset Leg Profile)

SS-2

 HW-D-0502


### Edge of Structural Support with Angle (Offset Leg Profile)

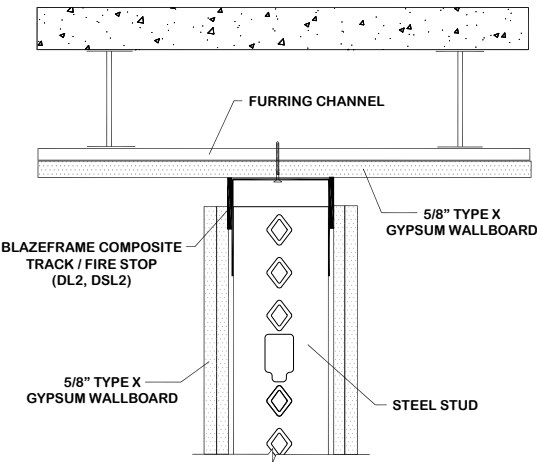
SS-28

 HW-D-0631




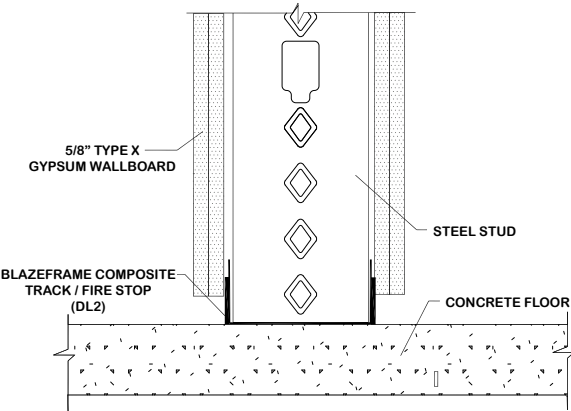
Under UL G500 Series Design

VM-6  
UL HW-D-0503

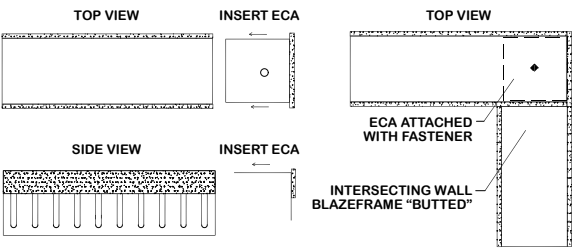


Bottom of Wall

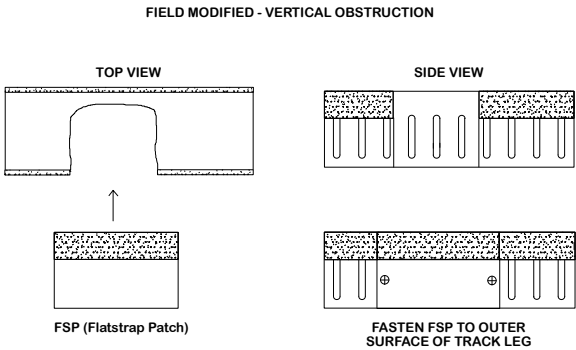
VM-12  
UL BW-S-0021



ECA - End Cap Angle  
Exterior Corner Application

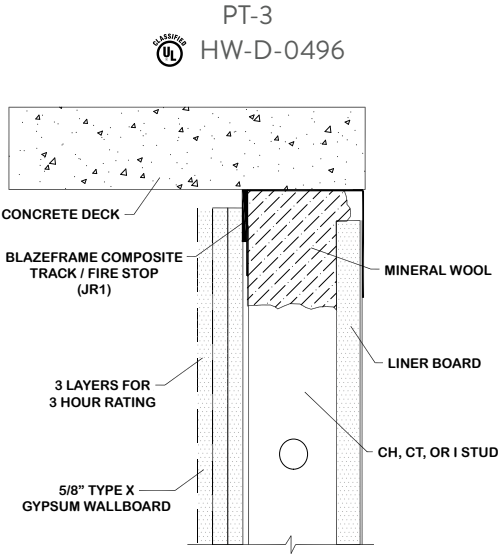


Flat Strap Patch  
Vertical Cavity Obstructions

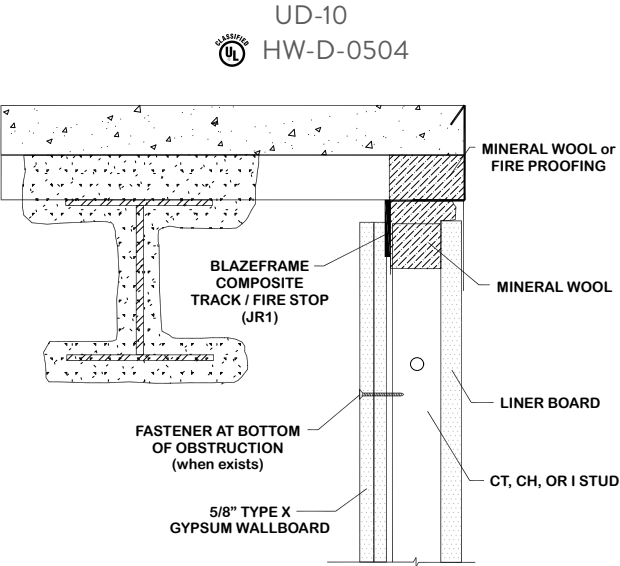


BlazeFrame Sample Details

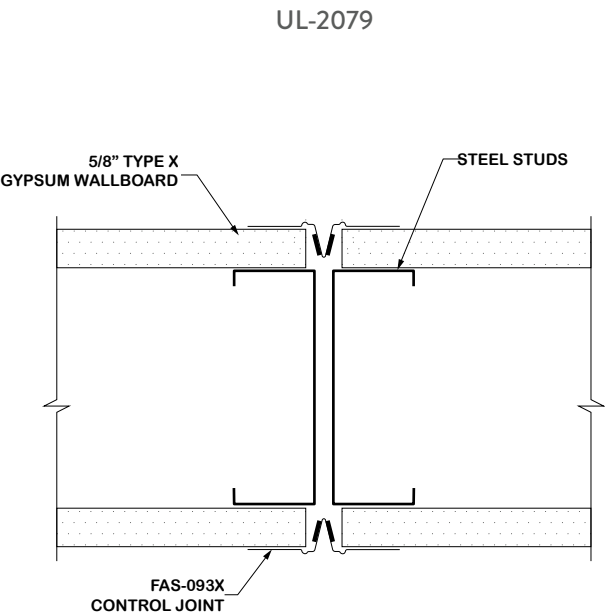
Shaft Wall Post Tension or Structural Concrete



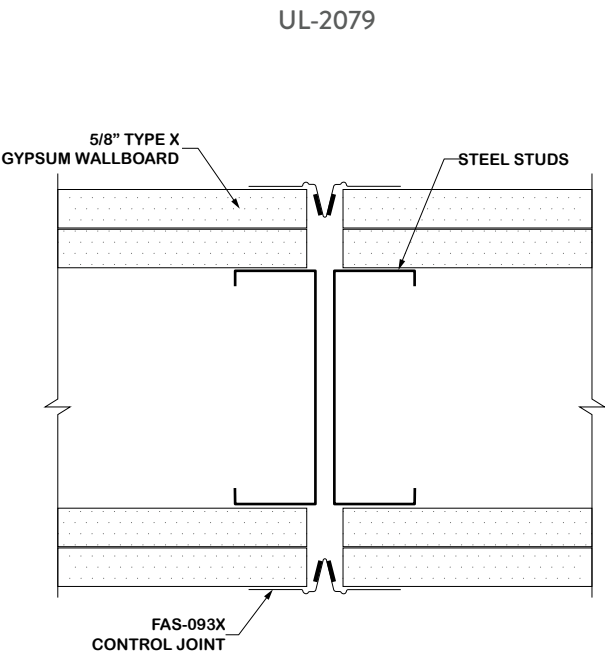
Shaft Wall Perpendicular to Unprotected Deck



FAS-093X Control Joint one layer each side (1-hour)



FAS-093X Control Joint two layers each side (2-hour)



## Code Approvals

### UL Approvals

UL Control - R25833 (US)- 1, 2 and 3 hr designs - UL 2079 standard compliant

### UL Listings

HW-D-0495	Protected Beam Penetration
HW-D-0496	Under Flat Concrete (shaft wall)
HW-D-0497	Parallel to Protected Beam (shaft wall)
HW-D-0498	Under PT or Structural Concrete
HW-D-0499	Parallel to Unprotected Fluted Metal Deck
HW-D-0500	Perpendicular Unprotected Fluted Metal Deck
HW-D-0501	Parallel to Beam (standard wall)
HW-D-0502	Parallel & Edge Overlap Under Structural Support
HW-D-0503	Under Layer "Type C" UL 500 Series Designs
HW-D-0504	Under Unprotected Fluted Metal Deck (shaft wall)
HW-D-0505	Under PT or Structural Concrete (chase wall)
HW-D-0506	Under Fluted Metal Deck (chase wall)
HW-D-0512	Perpendicular Protected Deck w/Fire Proofing Flute Fill
HW-D-0513	Perpendicular Unprotected Deck w/Mineral Wool only Flute Fill
HW-D-0543	Stair Shaft (093 Control Joint Optional)
HW-D-0544	Parallel under Flute (Flute Cover Plate)
HW-D-0558	Offset Leg Standard Wall Protected Roof Deck/Substrate
HW-D-0559	Offset Leg Shaft Wall Protected Roof Deck/Substrate
HW-D-0597	Parallel to Beam (Z-clip & Drywall Rip)
HW-D-0631	Shaft Wall Parallel & Edge Overlap Under Structural Support
HW-D-0632	PT or Structural Concrete Bare Slotted with Caulks
HW-D-0633	Fluted Metal Deck Bare Slotted with Flute Plate/Caulks
WW-S-0055	Vertical Wall to Wall Joint
BW-S-0021	Bottom of Wall

*Details shown are a limited sample of assemblies based on UL certified and listed assemblies. Additional assembly details, submittal sheets, and constructability designs are periodically added upon design and approval. Information can be viewed, downloaded, and printed from [www.clarkdietrich.com/BlazeFrame](http://www.clarkdietrich.com/BlazeFrame).*



## NEED TO SEND PRODUCT SUBMITTALS?

**Build BlazeFrame Product Submittals for your next project.**

Use ClarkDietrich's SubmittalPro® Product Submittal System to create and send a PDF package of BlazeFrame's product information and technical submittals based on your project's layout conditions.

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