Fire Barrier Expansion Joint Systems

Architectural Products

inpro®

They're not just Expansion Joint Systems.

They're masters of movement.

Acoustic authorities. Waterproofing warriors. Forbidders of Fire. Air and moisture mercenaries. They're on a mission to maintain the integrity of buildings in the face of earthquakes, hurricanes, fires and just plain everyday forces. Often the unsung heroes of building protection, they're built to do what they do every day because that's what it takes to keep people safe.
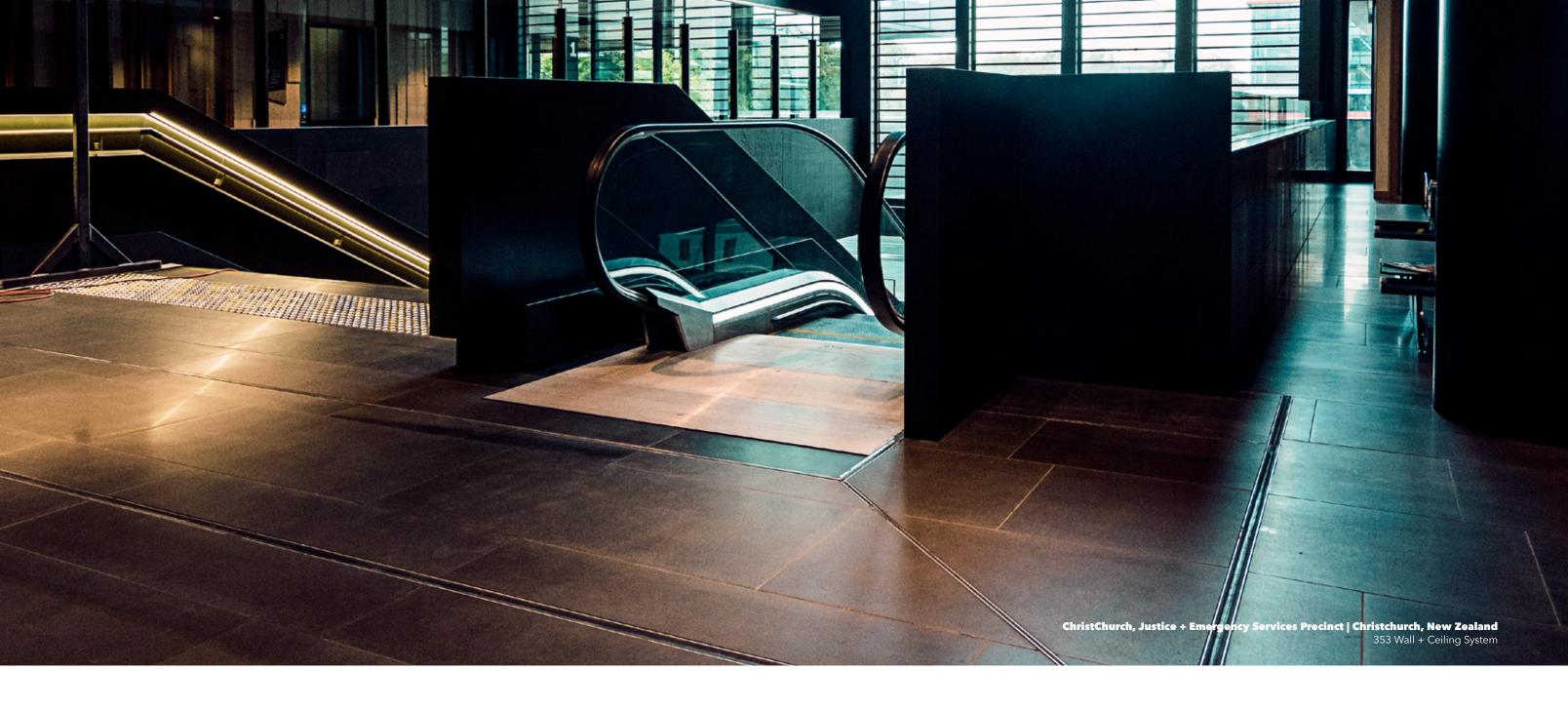
ChristChurch, Justice + Emergency Services Precinct | Christchurch, New Zealand
353 Wall + Ceiling System

why inpro.

Our Expansion Joint + Fire Barrier Systems are engineered to handle the unique conditions of your building.

engineered
obsessively

We constantly test and review our systems for continuous innovation to provide you with the best solutions. Yeah we're obsessed, but in a good way.

protected
by design

From ensuring smooth transitions for rolling equipment carts, gurneys and wheelchairs, to preventing the spread of smoke and fire, we integrate building protection right into the product's design.

manufactured
with care

As the manufacturer, we verify that only the best products are shipped out to your project.

Model Number Guide

Understanding product numbers

We've made it even easier for you to place the right system configuration in your next project.
Just visit inpro.com to download our industry leading specifications which are adaptable and easy to work with...just like us!

Series | Model

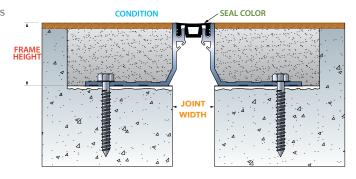|	
100	Elastomeric Seal Systems for Floors/Walls/Ceilings
200	Dual Elastomeric Seal Systems for Floors/Walls/Ceilings
300	Glide Plate Seismic Systems for Floors/Walls/Ceilings
400	Center Bar Seismic Systems for Floors/Walls/Ceilings
500	Seismic Systems for Floors
600	Exterior Seismic Systems for Walls and Roofs
700	Heavy Duty Seismic Systems for Floors
800	Cover Plate Systems for Floors / Walls / Ceilings
900	Fire Barrier Systems
1000	Exterior Compression Seals
1100	Foam Seals
1200	Silicone Foam Seals

Condition

A01	Floor to Floor/Roof to Roof
A02	Floor to Wall/Roof to Wall
A07	Wall to Wall or Ceiling to Ceiling
A09	Wall to Corner or Ceiling to Wall
V18	Ceiling to Wall for Acoustical Ceiling Systems
V24	Ceiling to Ceiling for Acoustical Ceiling Systems

Joint Width

025	1" (25mm)
038	1½" (38mm)
050	2" (51mm)
075	3" (76mm)
100	4" (102mm)
125	5" (125mm)
150	6" (152mm)
200	8" (203mm)
300	12" (305mm)
350	14" (356mm)
400	16" (406mm)
450	18" (457mm)
500	20" (508mm)
600	24" (600mm)

101 - **A01** - **025**
Series/Model Number | Condition | Joint Width
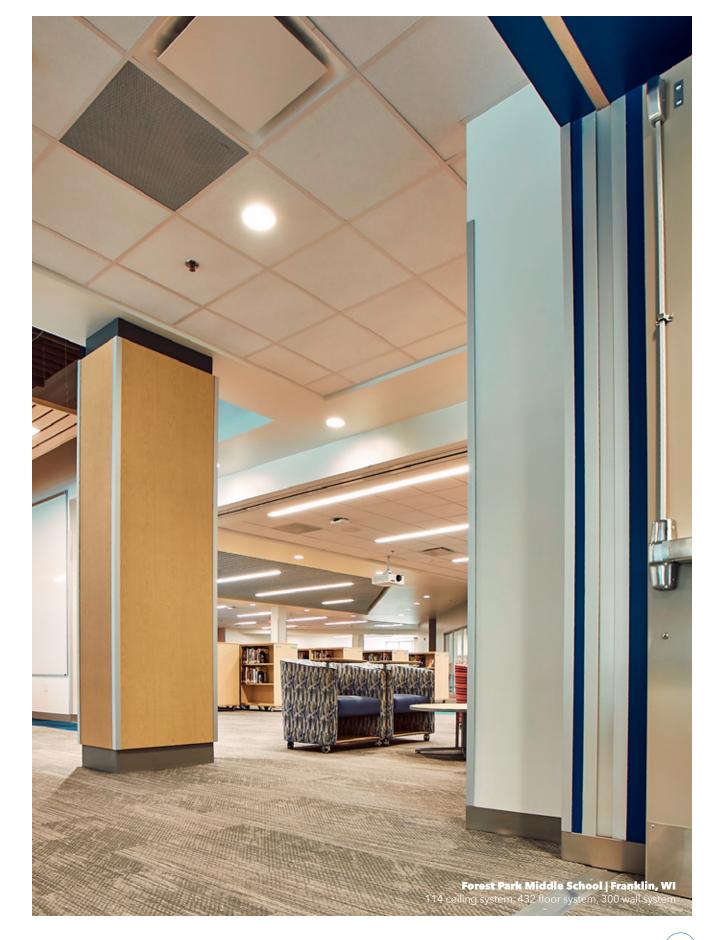
CONDITION — SEAL COLOR
FRAME HEIGHT
JOINT WIDTH

Loading Definitions

Standard/Moderate/Heavy Duty are designations as they relate to load ratings. These are provided as a guideline to assist in making a preliminary product selection for a given application.

- "Standard" suggests use in common applications such as typical office settings or other spaces where pedestrian traffic or occasional rubber-wheeled traffic like mail carts and light-weight cleaning equipment, luggage, etc. is the norm.

- "Moderate" suggests applications where occasional heavier maintenance equipment with soft rubber tires (such as gurneys, light duty scissor lifts, motorized cleaning equipment, etc.) would be added to the standard traffic. The systems in this category are comprised of heavier aluminum extrusions, with thicker walled extruded rubber inserts.

- "Heavy Duty" is for applications where truly heavy loads (such as vehicles) or high-point loads (such as mobile medical equipment, coin carts, materials handling equipment, etc.) are the norm. They are capable of multi-directional movements and are also available in surface or blockout mounted variations.
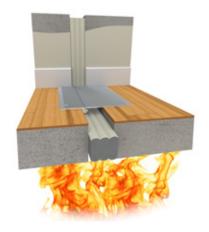
Forest Park Middle School | Franklin, WI
114 ceiling system, 432 floor system, 300 wall system

With lives on the line, **there's only one fire barrier you can trust.**

Fill the gap between disaster and rescue by filling the gaps in your building with expertly engineered protection

Fire + Moisture Barriers

	Fire Barriers	Moisture + Insulated Barriers
Page Number	14	22
Series	Fire Barriers	Moisture Barriers
Models	140, 520, 921/925, 935, 990/995, Water Guard®	IVB, RVB
Joint Opening	1"-24" (25mm – 600mm)	1"-24" (25mm – 600mm)
Movement +/-	25%-80% of Joint Width	50% of Joint Width

World Trade Center | New York City, NY
Colored CR Compression Seal, 615 Flush Mount Exterior System, Fireline® Water Guard Fire Barrier and other expansion joint systems

With lives on the line
there's only one fire barrier you can trust.

Fireline® Fire Barriers are the only products of their kind that took on the challenge to improve fire barriers and succeeded. When it comes to protecting your building and the people inside, we make it as easy as possible.

Achieve consistent and efficient installation with patented:

Pre-attached flanges — B

Male/Female connection points — A

Factory made transitions — C

Our Fireline® products are UL tested and approved. Visit our website for more information.

Fireline®
Fire Barriers

Fire Barriers

Building expansion joint and slab openings inherently create a pathway for fire and smoke to travel and spread throughout the structure. Inpro's broad array of Fire Barrier products provide protection for 1, 2, 3 and 4-hour rated conditions to keep the threat contained.

- **UL 2079 -** Test for fire resistance of building joint systems.
- **ULC S-115 -** Test for fire resistance of building joint systems for Canadian regulations.
- **EN 1366-4 -** Fire Resistance test for Service Installations. Linear Joint Seals. (Equivalent to BS 476, Part 20). 120 minutes.
- Fireline products are accepted by many local Civil Defense authorities throughout Middle Eastern/GCC Counties. Contact your local Inpro representative for territory specific details.

Note: Tested product configurations vary by region. Please contact your regional Inpro office for more information.

NEW! Fireline® 140 Fire Barrier

*Representative expansion joint system

Fireline 140 Blanket with Springs

Patented Torsion Springs + Pre Attached Flanges

Female End

Male End

Intumescent + High Temperature Layering

The first fire barrier of it's kind, the Fireline® 140 requires no mechanical fastening. The 140 'springs' into action during installation utilizing our patented spring technology for consistent outward pressure.
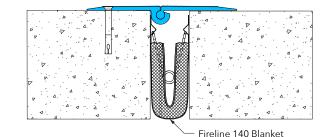
- System sold in 6 ½' (2m) lengths.
- Accommodates floor and wall joints ranging 2-4" (50-100mm) in size.
- 50% +/- seismic movement rating
- Passive Fire barrier system for 1 and 2 Hr. Fire Ratings.
- Inside mount eases installation of any coverplate or chase wall system.
- Tested in accordance with:
  - UL 2079/ ULC S-115 "FTH" (FTH: Rating Fire, Temperature and Hose)
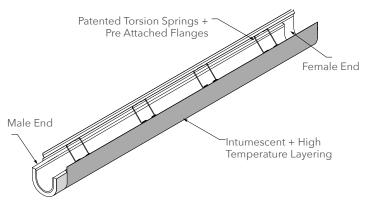 - ASTM-E119/E1399/E1966
- U.S. Pat. No. 9,745,597

▶ Watch the Installation video on our YouTube page.

v 520 Fire Blanket

*Representative expansion joint system

Concrete Screw   F520 Fire barrier with integral galvanized steel flange

Top (Flush) Mount - Floor to Floor (300-A01-100 System Shown)

*Representative expansion joint system

Concrete Screw

F520 Fire barrier with integral steel flange

Inside (Recessed) Mount - Floor to Floor (430-A01-100 System Shown)

*Representative expansion joint system

Concrete Screw
F520 Fire barrier with integral steel flange

Bottom Mount - Wall to Wall (300-A01-100 System Shown)

Designed with installation in mind, the Fireline® 520 system installs 3x faster than other products on the market. This fire barrier installs with consistency and efficiency.
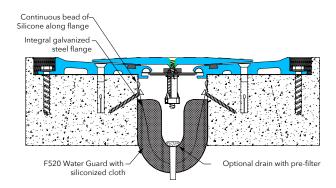
- Accommodates floor and wall joints from 6" (152mm) to 24" (610mm) wide.
- ± 80% movement.
- 1, 2 and 3 hour rated systems available.
- No fire caulk required at splices.
- Single sided installation.
- Mounting configurations available for both wall and floor conditions:
  - Top (flush) Mount
  - Low Profile (recessed) Mount
  - Bottom Mount
- Tested in accordance with: UL 2079/ ULC S-115 -ASTM-E119/E1399/E1966.
- View inpro.com/patents to view our patents on the F520.

▶ Watch the Installation video on our YouTube page.

Fireline® Water Guard® Series

Continuous bead of Silicone along flange

Integral galvanized steel flange

F520 Water Guard with siliconized cloth   Optional drain with pre-filter

Fireline® Water Guard® Series systems are the only fire blankets with a US patented, UL 2079 rated waterproof design. The Water Guard® protects the integrity and performance of the fire barrier from extended exposure to the elements during construction.
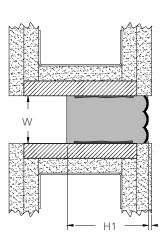
- Straight 4 ft. (1.2M) sections for easy handling.
- 4" - 24" Joint Opening (101mm - 610mm).
- 1-3 Hour Fire Rating.
- Optional drain tube.
- Available in Top, Inside and Bottom Mount Designs.
- Water Guard Series U.S. Pat. No 8,397,453

990/995 Fire Rated Foam

W

H1

- System sold in 6 ½" sections (2M).
- Rated Foam offer 2 & 3 hour fire ratings in accordance with UL-2079 (ULCS115S).
- Rated Foams are impregnated with fire retardant materials during the manufacturing process. This alleviates the concerns that any damage to the silicone facing would compromise both the Rating and Waterproofing unlike other foams on the market.
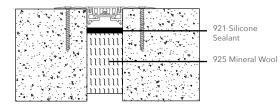
Ensure you specify the foam with the correct characteristics for your project.
- 990 foam meets thermal requirements of 25% +/- movement
- 995 Foam meets seismic characteristics of 50% +/- movement

- Foams can provide STC value of 54 for sound attenuation.
- Color options available.
- Foams can be applied to either vertical or horizontal applications.
- Available with Pick Resistant Sealant. Contact your representative for more information.

925 Mineral Wool and Sealant Fire Barrier

- System for joint widths up to 3" (127mm).
- Mineral wool supplied in 4' (1.2m) lengths and compressed into gap for easy installation.
- System accommodates horizontal movement to 20%.
- Up to 3 hour rated meeting UL2079.
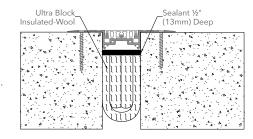- Meets "Hose Stream Test" for masonry walls.

921 Silicone Sealant

925 Mineral Wool

Reactofire Mineral Wool and Silicone Sealant Fire Barrier System (Optional)

2" (50mm) floor system shown (Applied to 106-A01 system)

935 Mineral Wool and Sealant Fire Barrier

- System for joint widths up to 5" (127mm).
- System accommodates horizontal movement to 50%.
- Up to 4 hours rated meeting UL2079.
- Mineral wool supplied in linear foot lengths and compressed into gap for easy installation.
- Meets "Hose Stream Test" for masonry walls.
- Concrete installations only.

Ultra Block Insulated Wool

Sealant ½" (13mm) Deep

2" (50mm) floor system shown (Applied to 106-A01 system)

UW Platteville Bridgeway Commons | Platteville, WI
Fireline® 520 Fire Barrier, 300 Series System, 811 Series System

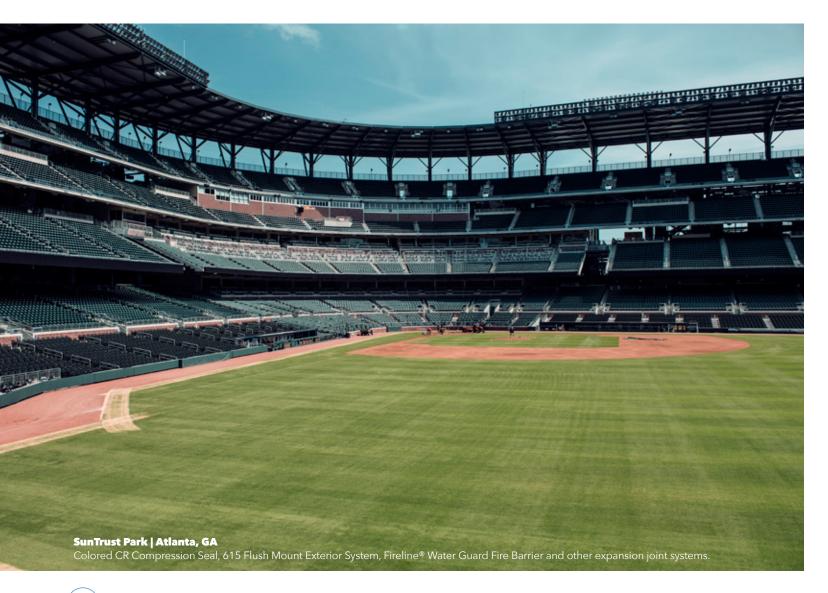# Guard against the biggest threats to fire barriers.

Threat 1: Water

One of the biggest obstacles with traditional fire barriers is that they can never get wet. Many times, fire blankets will arrive before the job site is ready for installation and it must sit out, exposed to the elements. With that type of exposure the barrier will have to be replaced because once the barrier is wet, it is destroyed...unless you're using Water Guard®.

Fireline® Water Guard® Series systems are the only fire blankets with a US patented, UL 2079 rated water proof design. The Water Guard® protects the integrity and performance of the fire barrier from extended exposure to the elements.

No need to worry if the fire barrier is installed for a few days, weeks or months before the building is enclosed. Water Guard® has been utilized in stadium projects where they were installed and exposed to the elements before cover-plate installation.

SunTrust Park | Atlanta, GA
Colored CR Compression Seal, 615 Flush Mount Exterior System, Fireline® Water Guard Fire Barrier and other expansion joint systems.

Threat 2: Poor Installation

A poor installation can result in gaps which will cause a chimney effect, allowing smoke and noxious fumes to spread. Fireline® reduces the margin of error with pre-attached metal flanges for drop-in installation and male/female splices.

Unlike other fire barriers, we've gone to extreme measures to ensure that installation is not only correct, but easy. All Fireline® fire barriers are engineered for one-step, drop-in installation saving time and money.

How Fireline® Fire Barriers Make Installation Easier

Factory Fabricated Splices

Preassembled Transitions

Preattached, Integral Flanges for Drop-In Installation

5 Key Tips for Successful Fire Barrier Installation

1. A solid substrate free of voids is critical for securing the fire barrier in place.
   This substrate MUST be of a UL-rated construction type.

2. Consider the fire barrier as a complete system. Seams, changes in direction, and multi-layered systems are good places to check first.

3. Expansion joint covers matching the tested conditions are a required part of a complete system. Pursue judgments or align your specifications with manufacturers that have completed this for you.

4. Inspect test document or request test data when writing specifications to ensure your product can meet the project demands.

5. Provide separate details for rated conditions - do not utilize canned or boilerplate details that were not developed with barriers specifically in mind.

Forest Park Middle School | Franklin, WI
114 ceiling system, 432 floor system, 300 wall system

Moisture Barriers

Moisture Barriers are designed to resist the penetration of moisture through wall, ceiling and floor assemblies of a structure. Inpro® Expansion Joint systems are designed to meet the challenges of keeping the elements where they belong: outside. Our membranes deter air currents and wind-driven rain to ensure the fire barrier stays dry.
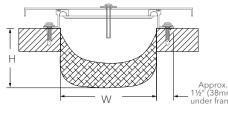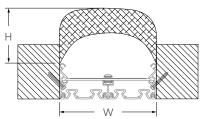
Standard Moisture Barrier

- High performance, fiber-reinforced EPDM membrane.
- Provided in conjunction with any exterior joints, also available as an additional feature to our complete line of products.
- Allows for joint movement matching the requirements of the architectural joint cover.
- Durable .045" (45mil) thick sheet good resists tearing, puncture and wear-through.
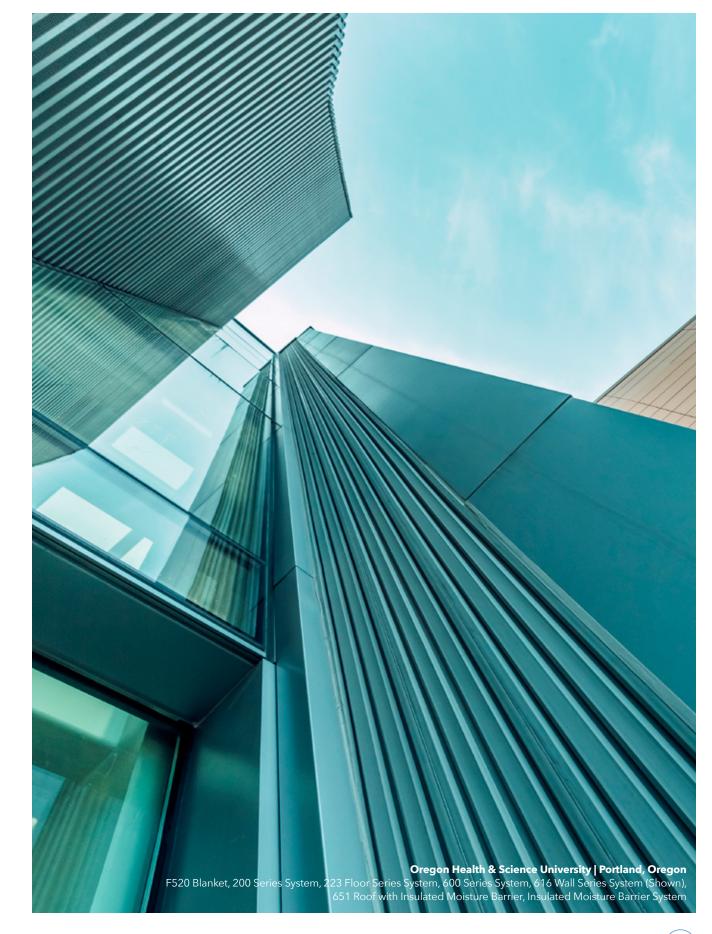- Optional drain tube shown.

Insulated Moisture Barrier

With EJ cover frames

Approx. 1½" (38mm) under frame

With EJ cover frames

- Exterior grade system capable of matching 50% joint movement.
- Consists of fiber-reinforced EPDM membranes, sandwiching commercial grade insulation, adhered and pinned together to form a seismic-capable assembly.
- Maintains a minimum R-Value of 15.
- Seams and directional transitions designed to ensure a watertight seal and positive condensation drainage.

Application	System	W Joint Width		H Insulated Vapor Barrier Depth		Movement ± Compression/Expansion	
		US	mm	US	mm	US	mm
Wall to Wall Wall to Corner Roof to Roof Roof to Wall	JL004-IVB	4"	102	5"	127	2"	51
	JL006-IVB	6"	152	5"	127	3"	76
	JL008-IVB	8"	203	6"	152	4"	102
	JL010-IVB	10"	254	7"	178	5"	127
	JL012-IVB	12"	305	8"	203	6"	152
	JL018-IVB	18"	457	10"	457	9"	229
	JL024-IVB	24"	610	12"	305	12"	305
	JL028-IVB	28"	711	14"	356	14"	356

Oregon Health & Science University | Portland, Oregon
F520 Blanket, 200 Series System, 223 Floor Series System, 600 Series System, 616 Wall Series System (Shown), 651 Roof with Insulated Moisture Barrier, Insulated Moisture Barrier System

Recent Projects

The list below is a sample of projects we've completed across the globe.
For more information or detailed project profiles, visit inpro.com/jointmaster.

MGM National Harbor
Oxon Hill, MD

Anchorage Museum Phase 2
Anchorage, AK

Weld County Courts
Greeley, CO

BCT-H Barracks Complex
Fort Carson, CO

LA Coroners Office
Los Angeles, CA

McCully District Park
Honolulu, HI

Richmond Masonic Temple
Richmond, VA

Lake Oswego Water Treatment Plant
Portland, OR

Yakama Nation Casino-Exteriors
Toppenish, WA

Cinemark Movie Theater
North Haven, CT

Kirkwood Public Library
Kirkwood, MO

Village of Paletine Police Department
Palatine, IL

Rock County Jail
Janesville, WI

Milwaukee Art Museum
Milwaukee, WI

World Trade Center
New York City, NY

OK State Fairgrounds Expo Center
Oklahoma City, OK

Jeanne Bellamah Comm Center
Albuquerque, NM

Cross Point Church
Oconomowoc, WI

River Spirit Casino
Tulsa, OK

Google Tech Corners Bldgs
Sunnyvale, CA

Boys & Girls Club @ Shoreline
Santa Cruz, CA

Pensacola Regional Airport
Pensacola, FL

Jackson Hole Airport Baggage Claim
Jackson Hole, WY

SDIA Rental Car
San Diego, CA

Lambert Airport Terminal 1 Baggage
St. Louis, MO

Delta Airlines Lobby / ATO Renovation Sea Tac
Airport
Seattle, WA

St. Mary's Hospital Century Project
Grand Junction, CO

Milwaukee Mitchell Airport
Milwaukee, WI

Las Vegas VA Hospital
Las Vegas, NV

SUMC Nuclear Medicine Dept
Standford, CA

Rocky Mtn Hospital for Children
Denver, CO

Moab Regional Medical Center
Moab, UT

UNMH Clinical Neuroscience Center
Albuquerque, NM

Alaska Regional Hospital
Anchorage, AK

Community Hospital of Grand Junction
Grand Junction, CO

Rush University Medical Center
Chicago, IL

Hospital Expansion & Renovation
Laurium, MI

Biloxi VA Mental Health
Biloxi, VA

Jennie Sealy
Galveston, TX

Mercy Cancer Center
Joplin, MO

Cleveland Clinic
Abu Dhabi, UAE

Citrus Bowl
Orlando, FL

SunTrust Stadium
Atlanta, GA

College of San Mateo
San Mateo, CA

CLSB - OHSU Life Sciences
Portland, OR

Owensboro Medical Center
Owensboro, KY

Parkland Hospital
Dallas, TX

Abraham Lincoln High School
San Fransisco, CA

Dufur School
Dufur, OR

Sierra Vista Middle School
La Puente, CA

Chemawa Indian School
Salem, OR

Jefferson Elementary School
West Allis, WI

BSU Student Union Transit Center
Boise, ID

Seattle University Fitness Center
Seattle, WA

Pima Community College
Tuscon, AZ

Purdue Honors College
West Lafayette, IN

Santa Clara Univ Phase 2 Student Residence
Santa Clara, CA

St. Louis University Residence Hall
St. Louis, MO

UW Platteville
Platteville, WI

Texas City High School
Texas City, TX

Waikiki Shopping Plaza
Honolulu, HI

Maui Lani Shopping Center
Wailuku, HI

Three Rivers Mall Regal Theater Connection
Kelso, WA

Harley Davidson of Scottsdale
Scottsdale, AZ

Rusnak MB Arcadia Mercedes-Benz
Arcadia, CA

Palos Verde Senior Living
Peoria, AZ

Oakmont Senior Housing
Windsor, CA

Forest park Middle School
Franklin, WI

Shinola Hotel
Detroit, MI

Wrigley Field renovations
Chicago, IL

Hamilton Sussex intermediate school
Sussex, WI

Austin Bergstrom International Airport (ABIA)
Austin, TX

Yas Mall
Abu Dhabi, UAE

Silver Spot movie theater
Brookfield, WI

Salt Lake County Office Building and Parking
Structure
Salt Lake City, UT

The District at Milpitas
Milpitas, CA

Stanford at Redwood City

Tacoma Art Museum
Tacoma, WA

Santa Clara Square
Santa Clara, CA

AVA at Esterra Park
Redmond, WA

Jefferson Stadium Park Apartments
Anaheim, CA

UC San Diego Osler Parking
La Jolla, CA

Idaho National Lab
Idaho Falls, ID

ICD Brookfield Place
Dubai, UAE

Nshama Town Square Development
Dubai, UAE

inpro®

obsessed with protecting buildings®

How they look. How they function.
And how they protect the health and safety
of the people who use them every day.

That's why we make hundreds of architectural
products all under one roof and work tirelessly to
make sure you and your buildings succeed.

Yeah, we are obsessed. But we wouldn't
have it any other way.

inpro.com

800.222.5556

**World Headquarters
S80 W18766 Apollo Drive
Muskego, WI 53150 USA**

IPC® Door + Wall Protection
Ascend® Elevator Protection
Juniper® Commercial Window Treatments
Clickeze® Privacy Systems
Endurant® Washroom Systems
SignScape® Architectural Signage
JointMaster® Expansion Joint Systems