

DURAFLEX[®] INSULATED DOOR

FLEXIBLE STRENGTH FOR OPERATIONAL LONGEVITY

DuraFlex is designed with durability in mind. Our proprietary panel technology helps keep your business moving in the face of harsh work environments, providing reliable security and functionality for years to come.



DuraFlex Insulated Doors

DESIGNED TO KEEP YOUR BUSINESS MOVING



WE BEND BUT DON'T BREAK

Watch DuraFlex strength in action.



DuraFlex is the long-term solution for businesses who can't afford to stop moving. Our flexible, high-strength doors were born as a solution to an all-too-common problem our customers faced. The time and money lost to an inoperable door was stacking up, and our trusted partners needed a sustainable solution.

With our customers' problem in mind, we set out to design a door that could stand the test of time in any work environment. At the end, we had created the new industry standard in durable overhead doors.

Engineering design is the key to our door's longevity. Our panels are constructed from a composite material that gives upon impact, but always flexes back into place. In a warehouse environment, a DuraFlex

door can take the bumps and bruises that come with the territory. Add on industry-strength hardware, 3" tracks, and springs with a minimum of 25,000 cycles, and you have a commercial overhead door that is designed to keep your business moving.

DuraFlex was created to solve a customer's problem. We take pride in our quick quote turnaround and customer-first approach to business. We continue to operate with the same goal we started with: ***keeping our customers' operations moving.***

▶ **PRODUCT DESCRIPTION**

DuraFlex Insulated Doors

• **Proprietary DuraFlex Material**

The door's exterior features a smooth, high-impact 3mm skin made from 0.012 grade 80KSI steel, G90 galvanized, and laminated to a high-density recycled polyethylene core.

The exterior is a high-gloss polar white, achieved through a baked-on polyester paint system that ensures excellent cleanability.

• **Endcaps**

The end caps are made of 14-gauge hot-dip galvanized steel.



Window Material

- ABS with a polycarbonate blend used for both interior and exterior frames
- Standard is 0.24" polycarbonate glazing
- Glazing seal positioned between the outer frame and the glazing
- Viewing area measures 9 5/8" in height by 21 5/8" in width

• **Component Tubes**

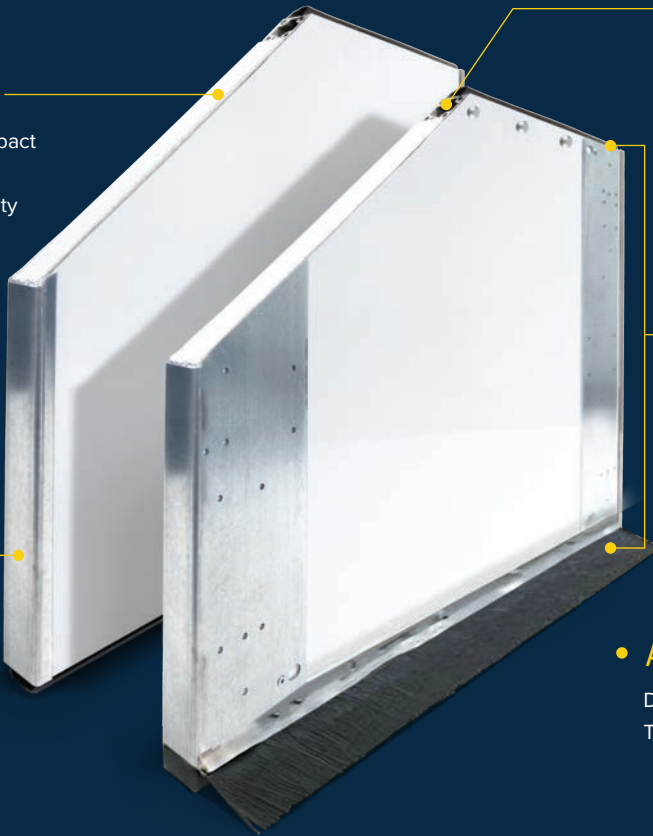
Tubes are designed to help prevent damage to the door in case of impact.

• **Seals**

• **3" Brush Seal**

• **Additional Information**

Door Has a Nominal Thickness of 2".



▶ **A COST-SAVING INVESTMENT**

With the installation of DuraFlex Insulated doors, you're setting up your business for long-term cost savings. DuraFlex doors are designed with durability in mind, standing up to wear and tear over time, and the combined savings of replacement and downtime costs keep your operation moving efficiently.

AVERAGE VALUE OF OWNERSHIP OVER 5 YEARS		
	Steel Door	DuraFlex
8x10 Door Cost (Avg.) Installed	\$3300	\$5162
Replace Door Section (Annually)	\$725	\$0
Opportunity Lost (Annually)	\$1000	\$0
Recommended Maintenance Lube	\$150	\$150
Total Cost of Ownership (5 Years)	\$12,075	\$5,312



A 3 DIFFERENT
TRACK OPTIONS

B INDUSTRY STANDARD
HARDWARE

C 25,000 LIFECYCLE
SPRINGS

STANDARD LIFT

Track Options



Standard Lift



Hi-Lift



Vertical Lift

► COMPONENTS AND CUSTOMIZATION



Track Designs

DuraFlex offers Standard Lift, Hi-Lift, and Vertical Lift track configurations as standard options. The tracks are 3" wide and made from 12-gauge hot-dip galvanized steel. Vertical track assemblies feature a 12-gauge hot-dip galvanized continuous clip mount wall angle. Horizontal tracks are reinforced with 2" x 2" 12-gauge hot-dip galvanized steel angles.



Industry Standard Hardware

1. Hinges (11-gauge) and top brackets (12-gauge) are manufactured from hot-dip galvanized steel.
2. The 3" diameter roller assemblies are constructed using case-hardened steel races and 10 ball rollers. High-strength steel roller shafts are supplied for larger door sizes and all wind load applications.
3. Standard seal package includes - top seal, side seals and bottom 3" brush seal.



Counterbalance

1. Springs are helically wound torsion type, made from low-stress, oil-tempered wire, designed to deliver a minimum of 25,000 cycles. Higher life cycle springs are available.
2. Solid zinc-plated shafts with continuous 1/4" keyways are standard for all applications.
3. Drums and spring fittings are crafted from high-strength die-cast aluminum.
4. Galvanized aircraft cables with 7x19 construction offer a minimum safety factor of 5:1.

Window Options



Full Vision Panel (Polycarbonate)



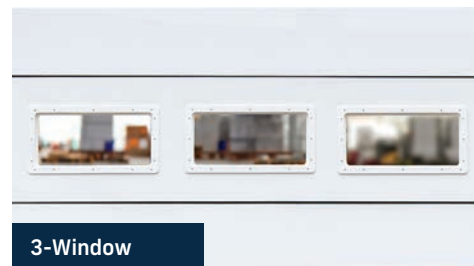
No Window



1-Window



2-Window



3-Window

Laminate Options

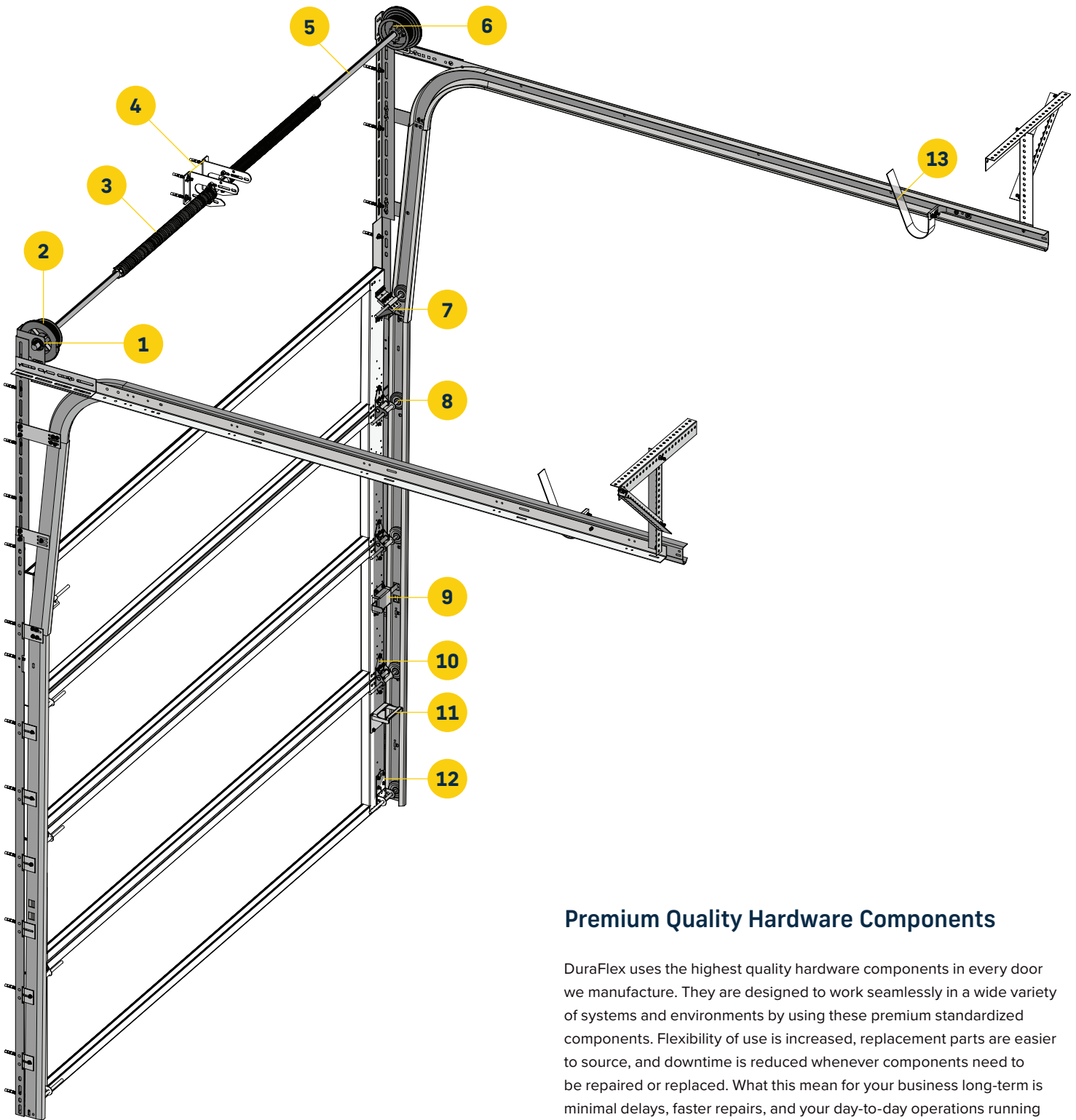


Laminated



Bolted

▶ PRODUCT BREAKDOWN



Premium Quality Hardware Components

DuraFlex uses the highest quality hardware components in every door we manufacture. They are designed to work seamlessly in a wide variety of systems and environments by using these premium standardized components. Flexibility of use is increased, replacement parts are easier to source, and downtime is reduced whenever components need to be repaired or replaced. What this mean for your business long-term is minimal delays, faster repairs, and your day-to-day operations running smoothly and efficiently.

► HARDWARE COMPONENTS



End Bearing Plate



Cables



Torsion Springs



Adjustable Spring Plates



1" Shafts

Standard shafts are 1" diameter galvanized with a 1/4" continuous keyway.



Ball Bearings



Adjustable Top Bracket



3" Steel Rollers



3" Heavy Duty Slide Lock



Roller Hinges



10 Gauge Step Plate Lift Handle



3" Track Bottom Bracket



Leaf Spring & Mounting Brackets

▶ STAND ALONE COMPONENTS

▶ Track Guards

T-Guards - Manufactured with 3/16" steel and powder-coated safety yellow, these guards are designed to be installed to the jamb to protect the track from accidental impacts. They are available in 24" and 48" heights.

Z-Guards - Manufactured with 3/16" steel and powder-coated in safety yellow, these guards are designed to be installed to the jamb to protect the track from accidental impacts. They are available in a 48" height.

Special Note – We are able to offer varying steel gauges upon request for track guards ex, 1/8", 1/4", and 3/8"

Available in 3 Different Styles



▶ Durabull Panels

Impact-resistant and replaceable panels for most sectional doors. These panels are manufactured with the same high-quality materials and components as those used in DuraFlex sectional doors, and are available in both bolted and laminated versions.

Available in 4 Different Styles



▶ Springs

Springs will be low-stress, helically wound torsion springs utilizing oil-tempered wire, in accordance with ASTM 229 specifications. The standard springs are designed for 25,000 cycles. DuraFlex offers Duplex, Triplex, 2 5/8", 3 3/4", and 6" springs to counterbalance any sectional door application, providing solutions for 10, 25, 50, and high-cycle needs.

Available in Duplex & Triplex Options

► TECHNICAL SPECIFICATIONS

► GENERAL OPERATING CLEARANCE

TYPE	Headroom	Sideroom*	Depth Into Room	Center Line of Springs
	3" Track	3" Track	3" Track	3" Track
Standard Lift Manual (15" R)	14 ½" - 16"	5"	Opening Height + 22"	Opening Height + 14 ½" (**)
Standard Lift With Trolley Operator	17" - 18 ½"		Opening Height + 60"	
Hi-Lift	Hi-Lift Amount + 14"		24" (One Side)	Opening Height - Lift Amount + 30"
Hi-Lift With Jack Shaft Operator				
Vertical Lift	Door Height + 12"	5"	18"	Double Opening Height + 4 ½"
Vertical Lift WithJack Shaft Operator		24" (One Side)		

(*) 8" of Sideroom required on one side for door having chain hoist. (**) Doors using the 5250-18 drum will require a floor to shaft center line of opening height plus 15 1/2".

► PANEL SELECTION

Door Height Number of Sections		DuraFlex Maximum Number of Windows	
Door Height	Number of Sections	Door Width	Max. Number of Windows
5'3" - 6'1"	3	5' - 7'5"	1
7'1" - 8'1"	4	7'6" - 9'5"	2
8'9" - 10'1"	5	9'6" - 12'6"	3
10'6" - 12'1"	6	12'7" - 16'6"	4
12'3" - 14'1"	7	16'7" - 18'10"	5
14'3" - 16'1"	8		

1.) General

1.01 Specification Includes:

- Impactable sectional overhead door assemblies.

1.02 Related Work

- Door opening preparation (jambs, header and spring pads), miscellaneous steel fabrication or structural steel work, field painting, and electrical work are in the scope of other trades.

1.03 Reference Standards

- A: ANSI/DASMA 102-American National Standards Institute Specifications for sectional overhead garage doors published by Door and Access Systems Manufacturers Association International.
- B: ASTM A 653/A 653M-Standard specification for zinc coated (galvanized) steel by Hot-Dip Process.
- C: ASTM 229-Specifications for oil tempered spring wire (Helically wound torsion springs).
- D: ASTM D1929-Standard test method for determining ignition temperatures of plastic materials.
- E: ASTM D635-Standard test method for Rate of Burning and/or extended time of burning plastic in a horizontal position.
- F: ASTM E84-Standard test method for surface burning characteristics (Flame Spread and Smoke Developed Index) of building materials.
- G: ASTM E330-DASMA 108 - Uniform Static Air Pressure Test.

1.04 Product Description

- A: DuraFlex Insulated Impactable Sectional Overhead Door using a smooth flush exterior skin.
- B: Track Design is Continuous Clip Mount Angle for Steel and Masonry.
- C: Panel substrate is 3MM thick composite sheet constructed using HDPE core and galvanized steel for the exterior skin. The interior substrate is a 3/32" thick high gloss white impactable Thermoplastic Polyolefin skin.
- D: Door Operation: manual, chain hoist or electric operators.

1.05 Warranty

- A: Seller warrants Product to be free from defects in material and workmanship under normal use for a period of one (1) year from date of delivery.

2.) Products

2.01 Manufacturer

- A: DuraFlex LLC located at 899 Venture BLVD, Wooster, Ohio manufactures the DuraFlex Insulated Impactable Sectional Overhead Door constructed of steel and Thermoplastic Polyolefin substrates laminated to pultruded polymer tubes reinforced with fibers.

2.02 Materials

- A: **Panel** assemblies utilize a steel composite sheet for the exterior substrate, thermoplastic polyolefin interior substrate, composite tubes, 1 1/2" thick expanded polystyrene core, acrylic structural tape and steel endcaps. The nominal door thickness is 2".

Note: Optional through bolt design is available to secure substrates to the composite tubes.

1. Exterior substrate is a 3MM thick composite sheet using Recycled High Density Polyethylene Core with .012" 80KSI "min" Hot-Dipped Galvanized (90)

steel laminated to both sides. Both sides of the substrate are painted to a Polar White color using a baked on polyester paint.

2. Interior substrate is a 3/32" thick white thermoplastic polyolefin.
3. The substrates are sandwiched between a 1 1/2" thick polystyrene core and laminated or bolted to the composite tubes.
4. Door panels are reinforced using 14-gauge hot-dipped galvanized full height wrap around steel endcaps. Endcaps are secured to the composite tube.
5. Composite tube material was tested in accordance with ASTM D1929 and achieved a minimum Self-Ignition temperature of 932 degrees F and a minimum Flash-Ignition temperature of 806 degrees F. Tubes meet a CC1 Classification for the Rate of Burn per ASTM D635 test criteria.
6. Exterior substrate material was tested in accordance with ASTM D929 and achieved a minimum Self-Ignition temperature of 806 degrees F and a minimum Flash-Ignition temperature of 788 degrees F. The exterior substrate achieved a CC1 classification for the Rate of Burn per ASTM D635. This material was tested in accordance to the ASTM E84 and achieved a Flame Spread Index of "0" and a Smoke Developed Index of 400.
7. Interior substrate material was tested in accordance with ASTM D1929 and achieved a minimum Self-Ignition temperature of 770 degrees F and a minimum Flash-Ignition temperature of 698 degrees F. The interior substrate achieved a CC2 classification for Rate of Burn per ATMS D635 test method. The Flame Spread Index is 85 and the Smoke Developed Index is 700 tested to ASTM E84 test method.
8. The polystyrene core achieved a 932 degree F minimum Self-Ignition temperature and a 770 degree F minimum Flash-Ignition temperature per ASTM D1929. The core material achieved a CC2 Rate of Burn classification per ASTM D635 test method.

B: Track Designs - DuraFlex provides Standard Lift, Hi-Lift and Vertical Lift track configurations as standard track selections. Track size is 3" using 12-gauge hot-dipped galvanized steel. Vertical track assemblies use a 12-gauge hot-dipped galvanized continuous clip mount wall angle. Horizontal tracks are reinforced with 2" x 2" x 12-gauge hot-dipped galvanized steel angles.

C: Hardware - (Hinges, Roller Assemblies, Top and Bottom Brackets)

1. Hinges (11 GA.) and Top brackets (12 GA.) are made from hot-dipped galvanized steel.
2. The 3" diameter Roller assemblies are constructed using case hardened steel race with 10 ball bearings. High strength steel roller shafts are supplied for larger door sizes and all wind load applications.
3. Bottom brackets are made from 13-gauge hot-dipped galvanized steel.

D: Counterbalance:

1. Springs are helically wound torsion type, low-stress oil tempered wire designed to provide a minimum of 25,000 cycles for a high percentage of door configurations. Higher life cycle springs are available.

2. Solid shaft (zinc plated) with continuous 1/4" keyway are supplied as standard for all applications.
3. Drums and spring fittings are manufactured using high strength die cast aluminum.
4. Galvanized aircraft cables with 7 x 19 construction shall provide a minimum 5:1 factor of safety.

E: Wind Load Designs -

1. Standard panel design of 9'2" wide are designed to withstand Design Pressures of +45 and -50.8 PSF tested in accordance with ASTM E330 and DASMA 108.
2. Standard panel design of 9'3" – 12'2" wide are designed to withstand Design Pressures of +33.9 and -37.8 PSF tested in accordance with ASTM E330 and DASMA 108).

2.03 Operation

A: Available operations are:

1. Manual push up
2. Chain Hoist
3. Electric operator

Note: Do NOT use jackshaft operators or chain hoist on the following track configurations:

- Standard lift track with roof pitch less than 2:12
- Hi-Lift less than 24"
- Hi-Lift between 15" – 23" with less 1:12 pitch.
- Special chain hoist kits with auxiliary shaft coupled to a trolley rail assembly are available for the above track configurations.

2.04 Locks

A: Heavy Duty 3" Slide Locks are supplied as standard.

2.05 Seal and Weatherstripping

A: Door panels have black EPDM or reinforced PVC bulb seals.

B: Co-Extruded Black TPO/TPV perimeter seals are available as an option.

C: Co-Extruded Black TPO/TPV head seals are available as an option.

2.06 Glazing

A: Polymer window units with 1/4" polycarbonate glazing are available.

3.) Execution

3.01 Installation

A: Required clearances for proper installation:

1. Verify opening size, sideroom, headroom, spring pads and depth into room.
2. Inspect product to ensure proper materials were specified for this application.
3. Product to be installed by an authorized trained technician.
4. Install product per manufacturer's installation instructions.
5. Fasteners to secure tracks and springs to the building are supplied by others.
6. Inspect door after installation to ensure proper operation.

Note: Door must be installed level, track assemblies must be installed plumb and level with the correct spacing from the door and shafts must be installed level to the door.



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WATCH DURAFLEX
STRENGTH IN ACTION:
ACCESS THE WEBSITE

YOUR ESTIMATED COST SAVINGS

Call DuraFlex Customer Service:
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