



# CLOPAY MODEL 3220

## Premium Duty 20 Gauge 2" Insulated Thermally Broken Steel Doors

**Quality Assurance** – Doors shall be insulated steel sectional overhead type as manufactured by Clopay Building Products Company. Each door is provided as one complete unit including sections, brackets, tracks, counterbalance mechanisms, hardware (list options) to suit the opening and headroom available. Standard maximum door size 26'2" wide x 18'0" high.

**Materials and Construction** – Sections shall be 2" thick sandwich construction consisting of stucco embossed exterior and interior steel skins pressure bonded to an expanded polystyrene core. Both steel skins to be separated by a continuous silicone filling forming a thermal break. Steel skins shall be roll formed commercial quality hot-dipped galvanized per ASTM A-924, A-653, phosphate coated, prepainted with primer and baked-on polyester top coat. Door sections constructed of full 20 gauge (.034" min.) exterior and .016" min. interior skins. Exterior skin to have .030" minor ribs in 4" or 5" on center. 18 gauge (.049" min.) or 16 gauge (.061" min.) steel end stiles shall be galvanized, primed and baked-on polyester top coated in white. All stiles engineered for easy hardware attachment through prepunched holes, double end stiles as required. 19 gauge galvanized steel support plates located under each hinge location, prepunched for hinge attachment. Full length .050" aluminum astragal retainer. Astragal to be U-shaped flexible PVC vinyl. Section joint to form weathertight tongue-and-groove joint. Galvanized steel step plate/lift handle provided on bottom section.

**Energy Values**

Section: U = .11; R = 9.1

**Finish** – Exterior and interior steel skins prefinished with a one full mil 3-coat process of a baked-on polyester top coat over primer on a phosphate coating. White or brown exterior; white interior. FINISH GUARANTEED AGAINST RUST-THROUGH FOR A FULL TEN YEARS; SECTIONS AGAINST DELAMINATION FOR A FULL FIVE YEARS.

**Hardware** – All hinges and brackets to be manufactured of hot-dipped galvanized steel, 14 gauge minimum. Ten ball steel rollers to be full floating ball bearing in case-hardened steel races, mounted to fit the taper of the track.

**Tracks** – 2" or 3" tracks as required. Vertical tracks to be minimum of 16 gauge galvanized steel, tapered and mounted for wedge type closing. Horizontal tracks to be minimum 14 gauge galvanized steel, reinforced with minimum 13 gauge galvanized steel angles as required. 3" track is 12 gauge.

**Spring Counterbalance** – Door assembly to be operated by a torsion spring counterbalance mechanism, with a helically wound oil tempered torsion spring mounted on a galvanized steel tube or solid steel shaft as required. Cable drums are die cast aluminum with high strength galvanized aircraft cable with minimum 7 to 1 safety factor.

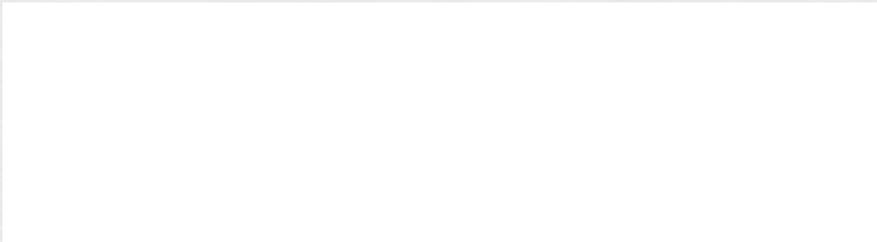
**Locking** – Inside spring loaded slide bolt lock on end stile shall engage slot in track.

**Wind Loading** – Door shall comply with ANSI/NAGDM 102-1988 or to meet specific application requirements.



**Rust-proof** – Panels are prepainted inside and out to inhibit rust. Hot-dipped, galvanized steel is painted with primer and given a tough oven-baked polyester top coat, to provide the most rust resistant steel door available. Ten year warranty against rust-through.

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**OPTIONS**

- A. Glazing** – 24" x 8" window lite of cellular PVC frame construction; glazing options include 1/8" DSB, 1/8" plexiglass, 3/4" insulated glass. 28" x 14" or 40" x 14" window lite of cellular PVC frame construction; glazing options include 1/8" DSB, 1/8" plexiglass, 3/4" insulated glass. Full vision section, prepainted white or brown; glazing options include 1/8" DSB, 1/8" plexiglass, 1/4" wire, and 1/2" insulated glass. Consult Commercial Information Assistance at 1-800-526-4301 for specific applications.
- B. High Cycle Spring** – Available in 25,000; 50,000; 100,000 cycle.
- C. Joint Seal** – Available durable compression seal can be field applied to stop air infiltration.
- D. Track** – Vertical lift, high lift, follow the roof slope and low headroom track available. Two inch or three inch as required.
- E. Weatherstripping** – Complete perimeter seals available in various materials.
- F. Locking** – Five pin cylinder lock with outside key, located at the first hinge location from right-hand side.
- G. Mullions** – Carry-away and roll-away available on door to 14' high (2" track only). Swing up available. Consult Commercial Information Assistance at 1-800-526-4301 for specific applications.
- H. Pass Door** – Available 2'8" wide, maximum 14'2" wide sections.
- I. Installation** – Install door including sections, brackets, guides, tracks, etc. in accordance with final shop drawings (if required) and instructions by Clopay Building Products Company.

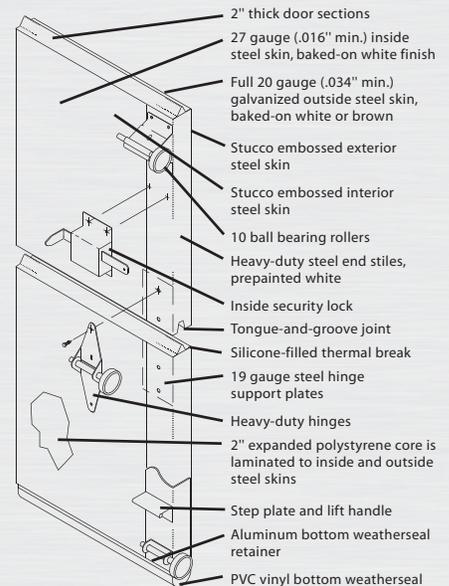
**Section Arrangement**

Door Height	Number of Sections
Up to 8'0"	4
8'3" to 10'0"	5
10'3" to 12'0"	6
12'3" to 14'0"	7
14'3" to 16'0"	8
16'3" to 18'0"	9

**Window Options 24" x 8" Windows\***

Door Width	Max Number of Window Lites
Up to 8'0"	2
8'3" to 10'0"	3
10'3" to 12'0"	4
12'3" to 14'0"	5
14'3" to 16'0"	6
16'3" to 18'0"	7

\*28" x 14", 40" x 14" windows depending on door width





# CLOPAY MODEL 3300

## Premium Insulated 3" Thermally Broken Steel Doors

**Quality Assurance** – Doors shall be insulated steel sectional overhead type as manufactured by Clopay Building Products Company. Each door is provided as one complete unit including sections, brackets, tracks, counterbalance mechanisms, hardware (list options) to suit the opening and headroom available. Standard maximum size 26'2" wide x 18'0" high.

**Materials and Construction** – Sections shall be 3" thick sandwich construction consisting of exterior and interior steel skins pressure bonded to an expanded polystyrene core. Both steel skins to be separated by a continuous silicone filling, forming a thermal break. Steel skins shall be roll formed commercial quality hot-dipped galvanized per ASTM A-924, A-653, phosphate coated, prepainted with primer and baked-on polyester top coat. Door sections constructed of 25 gauge (.019" min.) exterior and 27 gauge (.016" min.) interior skins, stucco embossed texture, exterior skin with .040" mirror ribs 4" or 5" on center. 16 gauge (.061" min.) steel end stiles shall be galvanized, primed and baked-on polyester top coated in white. All stiles engineered for easy hardware attachment through prepunched holes, double end stiles as required. 19 gauge (.038" min.) galvanized, primed steel support plates located under each hinge location, prepunched for hinge attachment. All metal parts between the exterior skin and interior skin are completely separated to form a thermal break. Galvanized steel step plate/lift handle provided on bottom section. Bottom section reinforced with full length .050" aluminum astragal retainer.

**Energy Values** – Sections: U = .08; R = 12.15

Air Infiltration door perimeter: no more than .20 CFM at 15 m.p.h. Section Joints: no air leakage shall be detected when tested in accordance with ASTM E-283. Note: When selecting thermally broken products, Clopay Building Products Company suggests comparing installed, tested U and R Values for realistic product performance. For complete test results, please contact Clopay Building Products Company.

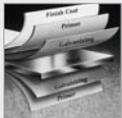
**Weatherstripping** – Top of door provided with vinyl sealing strip. Bottom weatherseal to be U-shaped vinyl in aluminum weatherproof retainer. Tongue-and-groove section joint prevents air infiltration. Optional jamb seal to be flexible scaling blade attached to track angle mounting with rigid retainer.

**Finish** – Exterior and interior steel skins prefinished with a one full mil 3-coat process of a baked-on polyester top coat over primer on a phosphate coating. White or brown exterior; white interior. FINISH GUARANTEED AGAINST RUST-THROUGH FOR A FULL TEN YEARS; SECTIONS AGAINST DELAMINATION FOR A FULL FIVE YEARS.

**Hardware** – All hinges and brackets to be manufactured of hot-dipped galvanized steel, 14 gauge minimum. Ten ball steel rollers to be full floating ball bearings in case-hardened steel races, mounted to fit the taper of the track.

**Tracks** – 2" or 3" track as required. Vertical tracks to be minimum of 16 gauge galvanized steel, tapered and mounted for wedge type closing. Horizontal tracks to be minimum 14 gauge galvanized steel, reinforced with minimum 13 gauge galvanized steel angles as required. 3" tracks to be 12 gauge.

**Spring Counterbalance** – Door assembly to be operated by a torsion spring counterbalance mechanism, with a helically wound, oil tempered torsion spring mounted on a galvanized steel tube or solid steel shaft as required. Cable drums are die cast aluminum with high strength galvanized aircraft cable with minimum 7 to 1 safety factor.



**Rust-proof** – Panels are prepainted inside and out to inhibit rust. Hot-dipped, galvanized steel is painted with primer and given a tough oven-baked polyester top coat, to provide the most rust resistant steel door available. Ten year warranty against rust-through.

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**Locking** – (Inside locking) spring loaded slide bolt lock on end stile shall engage slot in track.

**Wind Loading** – Consult Commercial Information Assistance at 1-800-526-4301 for specific wind load requirements.

### OPTIONS

- A. Glazing** – 24" x 8", 28" x 14", 40" x 14" window lite of cellular PVC frame construction; standard glazing in 3/4" insulated glass.
- B. High Cycle Spring** – Available in 25,000; 50,000; 100,000 cycle.
- C. Track** – Vertical lift, high lift, follow the roof slope and low headroom track available. Two inch or three inch as required.
- D. Locking** – Five pin cylinder lock with outside key, 16-1/2" inside lock bar engaging slot in track.
- E. Jamb Seal** – Flexible sealing blade attached to track angle mounting with rigid retainer.
- F. Oversized Doors** – Larger doors available. Consult Commercial Information Assistance at 1-800-526-4301 for specific applications.
- G. Installation** – Install door including sections, brackets, guides, tracks, etc. in accordance with final shop drawings (if required) and instructions by Clopay Building Products Company.

### Section Arrangement

Door Height	Number of Sections
Up to 8'0"	4
8'3" to 10'0"	5
10'3" to 12'0"	6
12'3" to 14'0"	7
14'3" to 16'0"	8
16'3" to 18'0"	9

### Window Options 24" x 8" Windows\*

Door Width	Max Number of Window Lites
Up to 9'2"	2
9'4" to 13'2"	3
13'4" to 16'2"	4
16'4" to 20'2"	5
20'4" to 24'2"	6
24'4" to 26'2"	7

\*28" x 14", 40" x 14" windows depending on door width

