ARCHITECTURAL SPECIFICATIONS

PART 1 GENERAL
1.01 Work Included
The doors will be Thermacore® Series 591 as manufactured by Overhead Door Corporation.

1.02 Related Work
Opening preparation, miscellaneous or structural metal work, access panels, finish or field painting, field electrical wiring, wire, conduit, fuses and disconnect switches are in the Scope of Work of other divisions or trades.

1.03 Quality Assurance
In accordance with accepted quality assurance guidelines for motor-operated doors, both the Thermacore door and electric operator (optional) shall be manufactured by a single-source producer of door systems, as by Overhead Door Corporation.

PART 2 PRODUCT
2.01 Sections
Section profile will be ribbed, textured surface. Sections will be roll formed, hot-dipped, galvanized steel exterior no less than .015” (3.81 mm). Sections will be manufactured by a continuous foamed-in-place polyurethane lamination process resulting in a metal/foam/metal sandwich of homogenous polyurethane insulation. Sections (Panels) will have a thickness of 1 5/8” (41 mm) and will incorporate a dual PVC thermal break and joint seal to prevent heat or cold conductivity.

2.02 Insulation
Insulation will be a rigid, foamed-in-place, polyurethane core free of CFCs and will be fully encapsulated in nonpermeable materials to prevent loss of thermal efficiency over time. The insulation will have an R-Value of 14.86 (2.63 W/Msq), U-Value of .067 (.380 Msq/W) – calculated values based on certified test data.

2.03 Air Infiltration
All doors will be constructed with an air infiltration rating of .08 cfm per square foot of door at 15 mph (2.26 Lpm at 24 kmph) and .08 cfm per square foot of door at 25 mph (2.26 Lpm at 40 kmph). (ASTM-E-283-73)

2.04 Windload
Door will be designed to meet or exceed building code requirements for windload. Deflection of door in the horizontal position will not exceed 1/120 of the door width. Consult factory for unusual requirements.

2.05 End Stiles
End stiles will be 10-gauge steel.

2.06 Springs
Standard springs will be 10,000 cycles. 25,000, 50,000, 75,000, or 100,000-cycle springs are optional.

2.07 Hardware
Hangs and fixtures will be galvanized steel. Pull-floating, ball-bearing rollers will have hardened steel races. Roller sizes will be adequate for design requirements and limitations.

2.08 Track
Track is 2” (51 mm) standard, or 3” (76 mm) optional, and angle mounted. Bracket mounted track is an option, but not available on full vertical doors.

2.09 Lock
Lock will be interior mounted slide lock.

2.10 Weatherstrip
Weatherstrip between sections will be a dual PVC thermal break and joint seal. Bottom weatherstrip will be EPDM rubber bulb-type strip.

2.11 Finish
Finish will be two-coat baked-on polyester with a white interior and white (Industrial brown) exterior.

2.12 Operation
Operation will be by manual pull rope. (Optional chain hoist and electric operator are available.)

PART 3 EXECUTION
3.01 Execution
Install the doors in accordance with Overhead Door Corporation instructions and standards, using an authorized Overhead Door Corporation distributor.

THE TURNKEY SOURCE FOR COMMERCIAL AND INDUSTRIAL SOLUTIONS AND SERVICE

Selection of Overhead Door products automatically includes the unequalled expertise and experience of Overhead Door Ribbon Distributors. Nationwide coverage by our 400+ Ribbon Distributors is unique in our industry—providing a single source for design and application consulting, installation, service and ongoing maintenance. Turnkey services to maximize the lasting value of your product choice. Your Overhead Door Distributor is also your only source for a full line of commercial and industrial door and operator systems specifically designed for integrated applications. For over four generations, our 400+ Ribbon Distributors have been committed to providing commercial and industrial door solutions. Combined with Overhead Door product design and manufacturing expertise, our distributors are a proud part of the Overhead Door family, sharing our name, our Ribbon logo and our commitment to industry leading innovation and excellence.

To talk with the Overhead Door Distributor nearest you, call 1-800-887-DOOR.

Overhead Door Corporation
2501 S. State Hwy. 121
Lewisville, Texas 75067
(800) 275-3290 Telephone
(972) 233-0367 Facsimile
C900_093 3/31/06 8:52 AM Page 1

Consistent with our policy of continuing product improvement, we reserve the right to change product specifications without notice or obligation.
Heavy-Duty Thermacore® Door System

Standard Features At a Glance

<table>
<thead>
<tr>
<th>Panel thickness</th>
<th>1 5/8&quot; (41 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-value</td>
<td>14.86 (2.63 W/Msq)</td>
</tr>
<tr>
<td>U-value</td>
<td>.067 (.380 Msq/W)</td>
</tr>
<tr>
<td>Air infiltration:</td>
<td></td>
</tr>
<tr>
<td>at 15 mph (24 kmph)</td>
<td>.08 cfm (2.26 Lpm)</td>
</tr>
<tr>
<td>at 25 mph (40 kmph)</td>
<td>.08 cfm (2.26 Lpm)</td>
</tr>
<tr>
<td>Windload design</td>
<td>As required for building code approval up to 75 psf</td>
</tr>
<tr>
<td>Thermal break</td>
<td>PVC</td>
</tr>
<tr>
<td>Exterior</td>
<td>.015&quot; (.381 mm) Galvanized steel</td>
</tr>
<tr>
<td>Exterior surface</td>
<td>Ribbed, textured</td>
</tr>
<tr>
<td>Standard springs</td>
<td>10,000 cycle</td>
</tr>
<tr>
<td>Maximum width</td>
<td>35'2&quot; (10,719 mm)</td>
</tr>
<tr>
<td>Maximum height</td>
<td>24'1&quot; (7,341 mm)</td>
</tr>
<tr>
<td>Exterior color</td>
<td>White or Industrial brown</td>
</tr>
<tr>
<td>Interior color</td>
<td>White</td>
</tr>
<tr>
<td>Warranty</td>
<td>10-year delamination</td>
</tr>
</tbody>
</table>

Options

- Thermal glazing
- Four-section pedestrian pass door
- High-usage components
- Jamb weatherstrip
- Electric operator or chain hoist
- Post-Tension drums
- Safety bottom fixture
- Bottom sensing edge
- EPDM rubber header seal
- Aluminum sash section available to 22'2" (6,756 mm) wide
- Exhaust ports

Thermacore® special internal construction allows hinges to be placed anywhere along the panel’s length permitting customization on the job — for fast and precise installation, repair or retrofit. Superior Field Servicability. Thermacore® doors feature four 1/2" (.381 mm) roll-formed, hot-dipped galvanized steel exterior panels. Windload design as required for building code approval up to 75 psf. Two coats of baked-on polyester paint — white (interior) and white or Industrial brown — on the ribbed, textured surface provide a handsome finish that will last for years. Our 10-year warranty against delamination means that we'll stand behind the quality of our doors at the outset and for the long haul.


When your project requires a door with an exceptional degree of thermal efficiency, the Thermacore® 591 is a proven performer. Thermacore® steel-polyurethane-steel panel construction provides a thermal barrier that withstands extreme climatic conditions and the most demanding environmental requirements.

This 1 5/8” (41 mm) thick, heavy-duty door fits a wide range of opening sizes and the spectrum of applications — making it the best-selling door system in the Thermacore® line and one of the most-specified insulated sectional doors in the industry. Boasting an R-value of 14.86 (2.63 W/Msq), a U-value of .067 (.380 Msq/W), and one of the best air infiltration ratings, the Thermacore® 591 will meet or exceed almost any thermal efficient application requirement.

Highly Engineered for High Thermal Efficiency. Thermacore®'s patented manufacturing process provides a CFC-free, fully encapsulated, foamed-in-place panel which maintains R-value performance year round – and year in and year out. Thermal breaks between internal and external skins, PVC thermal break and joint seal minimize air infiltration and provide one of the highest thermal efficiency ratings in the industry for specified applications.

Strong, Lightweight, Attractive and Durable. Thermacore® 591 doors feature .015" (.381 mm) roll-formed, hot-dipped galvanized steel exterior panels. Windload design as required for building code approval up to 75 psf. Two coats of baked-on polyester paint — white (interior) and white or Industrial brown — on the ribbed, textured surface provide a handsome finish that will last for years. Our 10-year warranty against delamination means that we'll stand behind the quality of our doors at the outset and for the long haul.

Many Options, Better Solutions. The Thermacore® 591 fits openings up to 35'2" (10,719 mm) wide and 24'1" (7,341 mm) high. A full line of electric operators ensures precision and trouble-free motor operation in a variety of mounting options (side, center or trolley). Available options include aluminum sash section up to 22'2" (6,756 mm) width, thermal glazing, pedestrian pass door, and jamb weatherstripping. Optional high-usage components expand the 591’s versatility to high-cycle conditions, with torsion springs in 25k, 50k, 75k or 100k cycles, a solid-steel shaft to reduce fatigue and deflection, and a heavy-duty 3" (76 mm) steel track for added durability in high-usage situations.

For additional information, or special project requirements, consult your Overhead Door Distributor or the Overhead Door Architectural Design Manual.