

Recommended
Selection and Usage Guide
for
Standard Steel Doors



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STEEL DOOR INSTITUTE
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SDI-108

Recommended Selection and Usage Guide for Standard Steel Doors

Purpose

To establish guide criteria for the selection and usage of 1-3/4" and 1-3/8" standard steel doors.

Selection

Standard steel doors are classified in four levels: Level 1 – 1-3/4" and 1-3/8" standard duty, Level 2 – 1-3/4" heavy duty, Level 3 – 1-3/4" extra heavy duty and Level 4 – 1-3/4" maximum duty.

Each of the four levels noted above offer a range of construction models and designs to meet architectural requirements for preference and appearance. The standard steel door construction models are full flush, seamless and, stile and rail.

Recommended minimum gauge requirements for the various levels and models of standard steel doors are indicated in table 1.

Usage

Selection of standard steel doors for general usage is made by analyzing criteria such as frequency of use, including subjection to and degree of possible abuse. Other criteria to be considered in door selection are: conformance to local building codes and fire code regulations; sound attenuation and/or insulation requirements; and architectural design and appearance.

Table 2 is a reference aid matching standard duty, heavy duty, extra heavy duty and maximum duty doors with general usage requirements within the classification of buildings. Where optional door levels and models are indicated, further analysis on an individual job basis is recommended.

When unusual or special door usage conditions are encountered, contact a representative member of the Steel Door Institute for consultation and guidance.

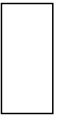
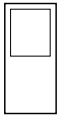
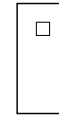



Table 1 – Standard steel door grades and models

Level	Model	Full Flush or Seamless			Construction	
		MSG No.	IP in	SI mm		
1	Standard Duty	1	20	0.032	0.8	Full Flush
		2				Seamless
2	Heavy Duty	1	18	0.042	1	Full Flush
		2				Seamless
3	Extra Heavy Duty	1	16	0.053	1.3	Full Flush
		2				Seamless
		3				*Stile & Rail
4	Maximum Duty	1	14	0.067	1.6	Full Flush
		2				Seamless

*Stiles and rails are 16 gauge; flush panels, when specified, are 18 gauge.

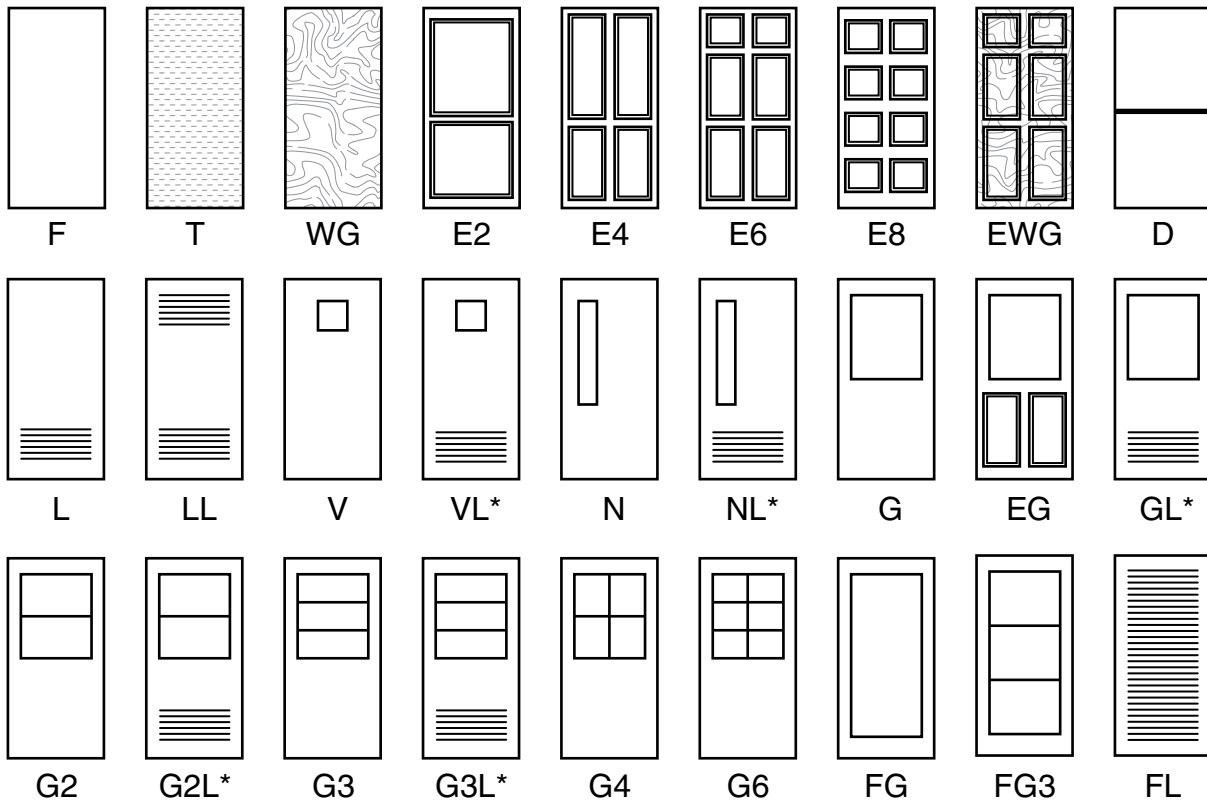
For complete standard steel door construction specifications and available sizes, refer to ANSI/SDI A250.8-2003 (R2008) (SDI-100), *Recommended Specifications for Standard Steel Doors and Frames* and ANSI/SDI A250.4-2001 *Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames, Frame Anchors and Hardware Reinforcings*.

Table 2 – Suggested door levels and applications

Building Types	Standard Steel Door Levels				Door Design Nomenclature					
	Level 1 Standard Duty 1-3/8" 1-3/4"	Level 2 Heavy Duty 1-3/4" only	Level 3 Extra Heavy Duty 1-3/4" only	Level 4 Maximum Duty 1-3/4" only	 F	 G	 V	 FG	 N	 L
Apartment										
Main Entrance		•	•		•	•		•	•	
Unit Entrance	•	•	•		•					
Bedroom	•				•					
Bathroom	•				•					•
Closet	•				•					•
Stairwell		•	•				•		•	
Dormitory										
Main Entrance		•	•	•		•		•	•	
Unit Entrance	•	•			•					
Bedroom	•	•			•					
Bathroom	•	•			•					•
Closet	•	•			•					•
Stairwell		•	•				•		•	
Hotel – Motel										
Unit Entrance	•	•			•					
Bathroom	•				•					
Closet	•				•					•
Stairwell		•	•				•		•	
Storage & Utility		•	•		•					•
Hospital – Nursing Home										
Main Entrance			•			•		•	•	
Patient Room		•			•					
Stairwell		•	•				•		•	
Operating & Exam.		•	•		•					
Bathroom		•	•		•					•
Closet	•	•			•					•
Recreation		•			•		•			
Kitchen		•	•				•			
Industrial										
Entrance & Exit			•	•		•		•	•	
Office	•	•			•	•				
Production			•			•				
Toilet		•	•		•					•
Tool			•	•	•					
Trucking			•	•		•				
Monorail			•	•	•	•				
Office										
Entrance			•			•		•	•	
Individual Office	•				•	•				
Closet	•				•					•
Toilet		•	•		•					
Stairwell		•	•				•		•	
Equipment		•	•		•					
Boiler		•	•		•					•
School										
Entrance & Exit			•	•		•		•	•	
Classroom		•				•			•	
Toilet		•	•		•					•
Gymnasium			•	•	•	•	•			
Cafeteria		•	•			•				
Stairwell		•	•				•		•	
Closet	•	•	•	•	•					•

Note: Table 2 is only a guide. Please consult ANSI A250.8 (SDI-100) and applicable building codes for additional requirements. For additional designs refer to ANSI/SDI A250.7, "Nomenclature for Standard Steel Doors and Frames."

Steel Door Institute Standard Steel Door Design Nomenclature



* Note: Design combination is indicated by lite followed by louver.

Consult SDI/ANSI A250.7 for further information on standard design nomenclature for Standard Steel Doors.

Nomenclature Letter Symbols

F – Flush	EWG – 6 Panel Embossed and Wood Grain	NL – Narrow Lite and Louvered
T – Textured	D – Dutch Door	G – Half Glass (options G2, G3, G4 and G6)
WG – Wood Grain	L – Louvered (top or bottom)	EG – Embossed and Half Glass
E2 – 2 Panel Embossed	LL – Louvered (top and bottom)	GL – Half Glass and Louvered
E4 – 4 Panel Embossed	V – Vision Lite	FG – Full Glass (option FG3)
E6 – 6 Panel Embossed	VL – Vision Lite and Louvered	FL – Full Louver
E8 – 8 Panel Embossed	N – Narrow Lite	

Louvered door designs are further specified as inserted louver (I), pierced (P), or air condition grille (A).
When ordering, specify design, louver size and/or free area requirements.

For the complete SDI Technical Data Series, contact the Steel Door Institute.



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