

Recommended
Selection and Usage Guide
for
Standard Steel Doors



SDI-108

Recommended Selection and Usage Guide for Standard Steel Doors

Purpose

To establish guide criteria for the selection and usage of 1- $\frac{3}{4}$ " and 1- $\frac{3}{8}$ " standard steel doors.

Selection

Standard steel doors are classified in four levels: Level 1 – 1- $\frac{3}{4}$ " and 1- $\frac{3}{8}$ " standard duty, Level 2 – 1- $\frac{3}{4}$ " heavy duty, Level 3 – 1- $\frac{3}{4}$ " extra heavy duty and Level 4 – 1- $\frac{3}{4}$ " 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 Steel Door Institute Technical Data Series, ANSI A250.8-03 (SDI-100), "Recommended Specifications for Standard Steel Doors and Frames" and ANSI A250.4-01 "Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames, Frame Anchors and Hardware Reinforcings."

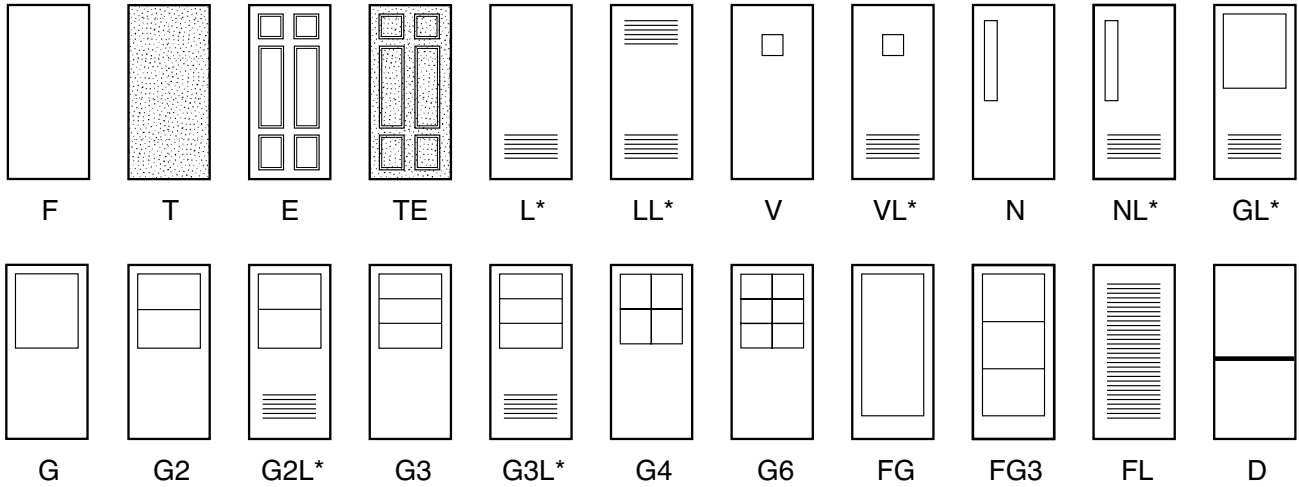
Table 2 – Suggested door levels and applications

Building Types	Standard Steel Door Levels				Door Design Nomenclature					
	Level 1 Standard Duty 1-3/8"	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 SDI-106, "Recommended Standard Door Type Nomenclature."

Note: Compliance with the local and national codes is the responsibility of the specifier.

Steel Door Institute Standard Steel Door Design Nomenclature



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

Consult SDI Technical Data Series SDI-106 for further information on standard design nomenclature for Standard Steel Doors.

Nomenclature Letter Symbols

- | | | |
|--|---|---|
| <p>F – Flush
 T – Textured
 E – Embossed
 TE – Textured and Embossed
 L[†] – Louvered (top or bottom)
 LL[†] – Louvered (top and bottom)</p> | <p>V – Vision Lite
 VL[†] – Vision Lite and Louvered
 N – Narrow Lite
 NL[†] – Narrow Lite and Louvered
 GL[†] – Half Glass and Louvered</p> | <p>G – Half Glass (options G2, G3, G4 and G6)
 FG – Full Glass (option FG3)
 FL – Full Louver
 D – Dutch Door</p> |
|--|---|---|

[†]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.

For more information on steel doors and frames, contact any of the following members of the Steel Door Institute

AMWELD BUILDING PRODUCTS, INC.
P.O. Box 267
Garrettsville, OH 44231
(330) 527-4385
Fax (330) 527-4510

DEANSTEEL MANUFACTURING CO.
111 Merchant Street
San Antonio, TX 78204-1496
(210) 226-8271
Fax (210) 226-0913

REPUBLIC
155 Republic Drive
McKenzie, TN 38201-0580
(731) 352-3383
Fax (731) 352-3001

BENCHMARK COMMERCIAL DOORS
3000 Mine Road
Fredericksburg, VA 22408
(540) 898-5800
Fax (540) 898-5894

THE KEWANEE CORPORATION
1642 Burlington Avenue
Kewanee, IL 61443
(309) 853-4481
Fax (309) 853-5466

SECURITY METAL PRODUCTS CORP.
5700 Hannum Avenue
Suite 250
Culver City, CA 90230
(310) 641-6690
Fax (310) 641-6601

CECO DOOR PRODUCTS
9159 Telecom Drive
Milan, TN 38358
(731) 686-8345
Fax (731) 686-4211

MESKER DOOR, INC.
3440 Stanwood Boulevard
Huntsville, AL 35811-9021
(256) 851-6670
Fax (888) 851-7896

STEELCRAFT
IR Security & Safety
9017 Blue Ash Road
Cincinnati, OH 45242
(513) 745-6400
Fax (513) 745-6446

CURRIES COMPANY
P.O. Box 1648
Mason City, IA 50402-1648
(641) 423-1334
Fax (641) 423-9104

PIONEER INDUSTRIES, INC.
171 South Newman Street
Hackensack, NJ 07601
(201) 933-1900
Fax (201) 933-9580



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