

Technical Education Series - SDI 108

SDI 108 ([Recommended Selection and Usage Guide for Standard Steel Doors](#)) is one of the Steel Door Institute's most referenced standards. This document assists architects and specifiers with the proper selection of steel doors and frames for various applications. It is intended to guide design professionals in choosing the correct door level and design for their projects.

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
Hotel – Motel										
Unit Entrance	•	•			•					
Bathroom	•				•					
Closet	•				•					•
Stairwell		•	•				•		•	

Table 2 in SDI 108 suggests a door level and design for various building types such as offices, industrial, schools, and hotels, among others. Door levels are from 1 (Standard Duty) through 4 (Maximum Duty). The lower the Manufacturers' Standard Gauge (MSG), the thicker the steel. A very general rule of thumb is that the gauge number is how many sheets it would take to be an inch thick. Therefore twenty MSG #20 steel sheets stacked together would be about an inch thick.

In addition to showing which level door to select, the table also shows which of the six most common door designs are ideal for a project. For example, if a design professional is seeking an entrance door to a hotel, SDI 108 suggests a Level 1 or 2 flush door (see image below). Please note this document is solely a guide and the ultimate decision is up to the specifier.

The last page of the standard has 27 popular door designs along with their nomenclature. SDI documents are reviewed every five years to determine if revisions need to be made. This standard was last revised in 2010, when more door designs and nomenclature were added. There are more designs available beyond the 27 shown, which vary by manufacturer.

Standard Update - SDI 129 Hinge and Strike Locations Made Easy

It often seems that there are as many hinge and strike locations for doors as there are doors themselves. Projects have a variety of doors and frames, often supplied by multiple manufacturers. It can be a daunting task to match the hinge and strike locations for the various doors and frames.

SDI 129 ([Hinge and Strike Spacing](#)) provides measurements such as opening height, strike location, and hinge spacing for each manufacturer's products. It also includes diagrams that clearly show the location for each measurement.

The standard was revised in 2012, after a detailed review and revision by the SDI Technical Committee. The previous version of the standard (2004) was organized with a separate page for each measurement, such as 3-1/2" hinges for 1-3/8" thick doors. It then listed the manufacturers with products that match those dimensions. The updated version has each section dedicated to one manufacturer, with the hinge and strike locations for the products that they offer. The new format allows professionals in the field to quickly reference their manufacturer's measurements.

A new section was added to SDI-129 that provides measurements for doors manufactured by companies

that are no longer in business. This simplifies the process of finding a replacement from an SDI manufacturer with a matching product.

The new version of SDI-129 represents many updates and improvements, however it is intended for reference only. Manufacturers should be contacted for specific measurements.

Army Corps of Engineers Trains with SDI Standards

The U.S. Army Corps of Engineers has used SDI standards in its training program for more than 20 years. We are honored to provide our standards to an organization whose mission is to “provide vital public engineering services in peace and war to strengthen our Nation’s security, energize the economy, and reduce risks from disasters.”

SDI’s hollow metal door and frame technical documents are detailed and extensive. Jeff Wherry, Managing Director of SDI, said, “We have been supplying the Army Corps of Engineers with [Fact Files](#) since the early 1990s. They are comfortable in that if they specify to SDI standards they can be assured of receiving a quality product that meets the rigors of their facilities.”

Coast Guard Seeks SDI's Expertise

The U.S. Coast Guard recently asked for SDI’s assistance in verifying their specifications are complete and comparable to SDI standards. There have been quality issues in the past, and it became evident that specifying products manufactured to SDI standards would alleviate back-charges and other problems that may occur when underspecifying.

The SDI Technical Committee—our nationwide team of hollow metal door and frame experts—is reviewing the Coast Guard’s specifications to ensure future projects are correctly specified.

Black Mountain Door Joins SDI



[Black Mountain Door](#) is the newest member of the Steel Door Institute, raising the number of hollow metal door and frame manufacturers in the select organization to 11.

To gain membership in SDI, a company must meet business criteria and also be certified as meeting the rigorous product standards of SDI. Certification is based on a site audit by hollow metal door and frame engineers.

Jason Lisewski, Vice President at Black Mountain Door, said, "We are very excited to be a part of the industry’s most prestigious standards organization. Specifiers and architects have trusted SDI’s hollow metal door and frame standards for over 55 years."



The [Steel Door Institute](#) was established in 1954 as a voluntary, unincorporated, non-profit business association whose mission is to promote the use of steel doors and frames in the construction industry.