



Standards As Tough As Steel.™



OCTOBER 2015

## Schools Learn that Steel Passes the Test

There isn't a sweeter sound in the world to cooped up students than the final bell. They immediately stampede out of the building, barreling through anything between them and the great outdoors.

Designers and facility managers have learned that wood doors can't withstand this type of abuse day after day. Steel lasts much longer than wood due to its natural strength and durability.

When steel does get damaged, it's easy to repair. Facility managers just apply bondo, sand, and paint it, and the door looks like new again.

View the [info sheet and product selection guide](#) on the right for more information. The next school you work with will be glad you did.



## Trending Questions on Fire Ratings and Smoke Doors

It's been SDI's long-standing goal to continuously develop free and easy to understand information on steel doors and frames. More than 20,000 people a month rely on SDI's [standards](#), [videos](#), [FAQ](#), and [online courses](#) for the information they need.

When the website doesn't have the information you're seeking, we welcome you to [contact SDI](#) with questions on standards or general steel door and frame inquiries. (Please contact the manufacturer with product-specific questions.)

When the same question keeps coming up, we like to answer it in the FAQ or newsletter so it helps others

who may be wondering the same thing. The two questions below have been asked by numerous architects lately.

### Three Hour Fire Walls

Table 1 in [SDI-118](#) (below) shows the required fire ratings of walls and door assemblies for a variety of openings. We are often asked what rating a door assembly should have when paired with a 3 hour wall.

Opening	Wall Rating	Door and Frame Rating	Description and Use
	4 Hour	3 Hour (180 minutes)	These openings are in walls that separate buildings or divide a single building into designated fire areas.
	2 Hour	1-½ Hour (90 minute)	Openings of this type are used in enclosures of vertical communication or egress through buildings. Examples of these types of openings include stairwells and elevator shafts.
	1 Hour	1 Hour (60 minute)	These door and frame assemblies divide occupancies in a building.

*SDI-118 - Basic Fire Door, Fire Door Frame, Transom/Sidelight Frame, and Window Frame Requirements*

Per the International Building Code (IBC) 2015, a three hour wall should have a **three hour door assembly**.

TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY RATING (hours)	MINIMUM FIRE DOOR AND FIRE SHUTTER ASSEMBLY RATING (hours)	DOOR VISION PANEL SIZE <sup>b</sup>	FIRE-RATED GLAZING MARKING DOOR VISION PANEL <sup>d</sup>	MINIMUM SIDELIGHT/TRANSOM ASSEMBLY RATING (hours)		FIRE-RATED GLAZING MARKING SIDELIGHT/TRANSOM PANEL	
					Fire protection	Fire resistance	Fire protection	Fire resistance
Fire walls and fire barriers having a required fire-resistance rating greater than 1 hour	4	3	See Note b	D-H-W-240	Not Permitted	4	Not Permitted	W-240
	3	3 <sup>a</sup>	See Note b	D-H-W-180	Not Permitted	3	Not Permitted	W-180
	2	1½	100 sq. in.	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-W-90	Not Permitted	2	Not Permitted	W-120
	1½	1½	100 sq. in.	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-W-90	Not Permitted	1½	Not Permitted	W-90

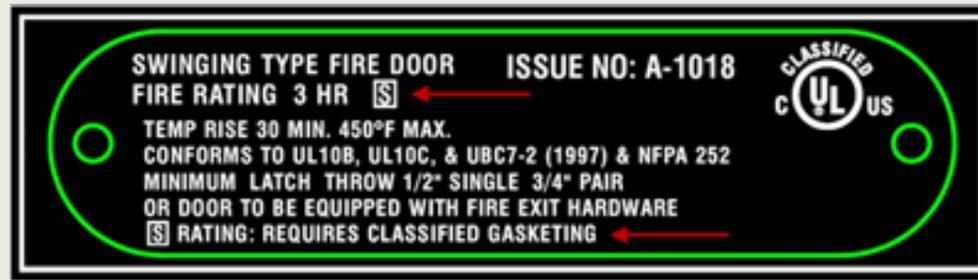
*Table 716.5 of the IBC-2015*

### No Smoking

A number of architects have asked questions about 20 minute smoke control doors, often referring to them

as 'smoke doors' and 'fire doors' interchangeably. Some asked if 20 minute smoke doors are inherently fire rated for 20 minutes.

They are not, however most 20-minute doors would be required to have the S label because they are often located in corridors and smoke barriers. The S in the fire label below shows that this fire door is also rated for use as a smoke door assembly, and therefore has to be installed and maintained per NFPA 105 – *Standard for Smoke Door Assemblies and Other Opening Protectives*.



### Relevant Codes & Standards

It can be challenging for design professionals to keep up with the myriad of codes and standards that impact their work.

In response to many requests, SDI has developed a new page with the [Codes and Standards Applicable to Steel Doors and Frames](#).

Each standard has a brief summary and is categorized by fire code, accessibility, sustainability, etc.

[View New Codes & Standards Pages](#)

### SDI's Most Popular Content

1. [Gallery of Products](#) - See some of the doors offered by SDI members
2. [Specialty Products](#) - Information on and manufacturers of specialty door assemblies
3. [ANSI/SDI A250.8](#) - Our most popular standard
4. [Technical Data Series](#) - All SDI standards
5. [ANSI/SDI Documents](#) - All ANSI/SDI standards
6. [SDI Members](#) - Specify SDI members. They are the only manufacturers who have proved that they meet our standards.