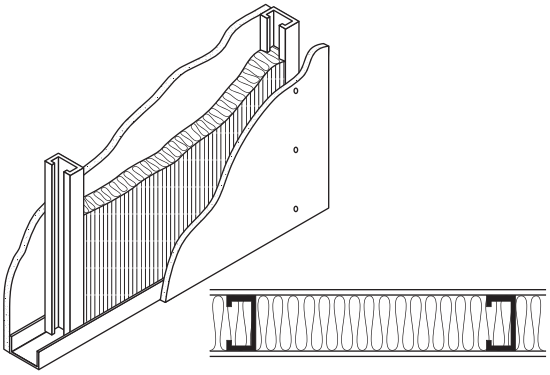
Metal Stud Walls

STC-45 (Figure 13)

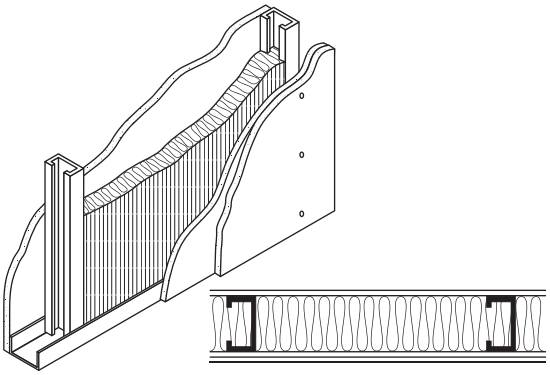


2½" metal studs (25 gauge), 24" o.c., single layer ½" gypsum board each side, one thickness (2 ½"-2¾") fiber glass batt insulation.

Fire rating - NR Single Finish

Variation	Construction	Finish*	STC	Fire Rating
13A	½" GB No insulation	Single	36	NR
13B	⅝" Type X GB No insulation	Single	39	1 hr.
13C	⅝" Type X GB (2½"-2¾") fiber glass batt	Single	47	1 hr.

STC-50 (Figure 14)

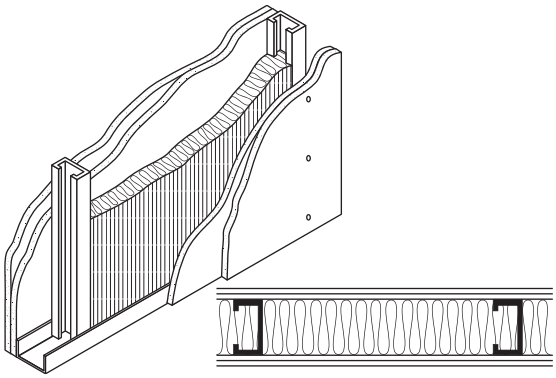


2½" metal studs (25 gauge), 24" o.c., single layer ½" gypsum board each side, double layer other side, one thickness (2½"-2¾") fiber glass batt insulation.

Fire rating - NR Unbalanced Finish

Variation	Construction	Finish*	STC	Fire Rating
14A	½" GB No insulation	Unbal.	39	NR
14B	⅝" Type X GB No insulation	Unbal.	44	1 hr.
14C	⅝" Type X GB (2½"-2¾") fiber glass batt.	Unbal.	52	1 hr.

STC-54 (Figure 15)

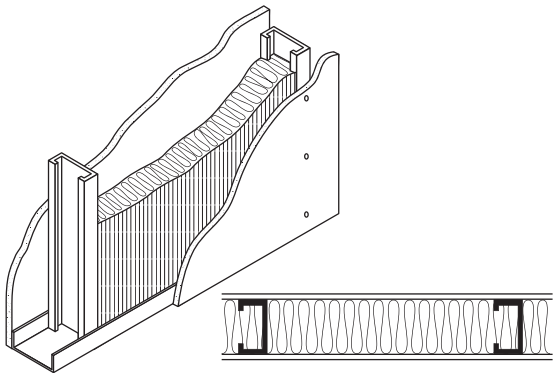


2½" metal studs (25 gauge), 24" o.c., double layer ½" gypsum board each side, one thickness (2 ½"-2¾") fiber glass batt insulation.

Fire rating - NR Balanced Finish

Variation	Construction	Finish*	STC	Fire Rating
15A	½" Type X GB No insulation	Balanced	45	2 hr.
15B	⅝" Type X GB No insulation	Balanced	48	2 hr.
15C	⅝" Type X GB (2½"-2¾") fiber glass batt	Balanced	57	2 hr.

STC-47 (Figure 16)



3⅝" metal studs (25 gauge), 24" o.c., single layer ½" Type X gypsum board each side, one thickness (3 ½"- 4") fiber glass batt insulation.

Fire rating - 1 hr. Single Finish

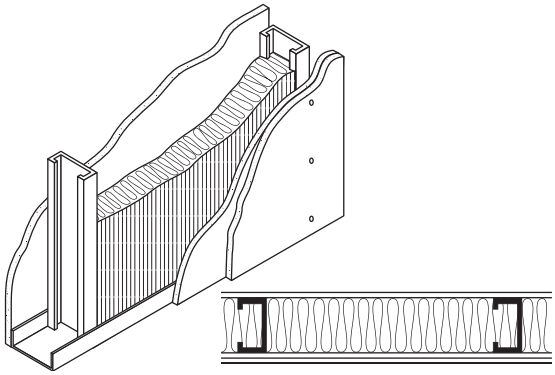
Variation	Construction	Finish*	STC	Fire Rating
16A	½" GB No insulation	Single	39	NR
16B	⅝" Type X GB No insulation	Single	39	1 hr.
16C	⅝" Type X GB (3½"-4") fiber glass batt.	Single	50	1 hr.

Source: NAIMA

* Single – one wall finish each side Unbalanced – one wall finish one side, two wall finishes other side Balanced – two wall finishes each side.

Partitions with STC ratings within 1-2 points of the listed criteria are acceptable given the anticipated tolerances in repeat tests. In fact, discrepancies between testing labs of 1-2 dB on identical configurations are not unusual. (Subjectively, the human ear would consider a 1-2 dB change as "non-discern ible" at best, which is insignificant).

STC-52 (Figure 17)

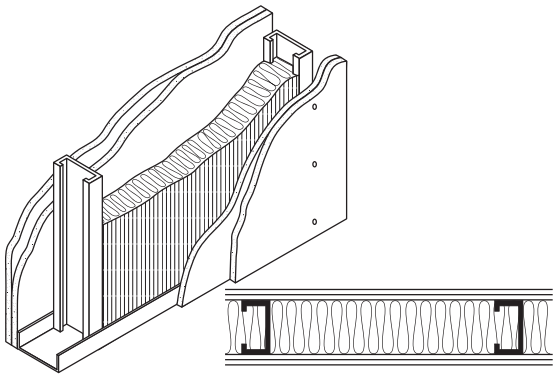


3⅝" metal studs (25 gauge), 24" o.c., single layer ½" gypsum board one side, double layer other side, one thickness (3 ½"-4") fiber glass batt insulation.

Fire rating - NR Unbalanced Finish

Variation	Construction	Finish*	STC	Fire Rating
17A	½" GB No insulation	Unbal.	42	NR
17B	⅝" Type X GB No insulation	Unbal.	47	1 hr.
17C	⅝" Type X GB (3½"-4") fiber glass batt	Unbal.	55	1 hr.

STC-56 (Figure 18)



3⅝" metal studs (25 gauge), 24" o.c., double layer ½" Type X gypsum board each side, one thickness (3 ½"- 4") fiber glass batt insulation.

Fire rating - 2 hr Balanced Finish

Variation	Construction	Finish*	STC	Fire Rating
18A	½" Type X GB No insulation	Balanced	50	2 hr.
18B	⅝" Type X GB No insulation	Balanced	52	2 hr.
18C	5/8" Type X GB (3½"-4") fiber glass batt	Balanced	58	2 hr.

Source: NAIMA

* Single – one wall finish each side Unbalanced – one wall finish one side, two wall finishes other side Balanced – two wall finishes each side.

Partitions with STC ratings within 1-2 points of the listed criteria are acceptable given the anticipated tolerances in repeat tests. In fact, discrepancies between testing labs of 1-2 dB on identical configurations are not unusual. (Subjectively, the human ear would consider a 1-2 dB change as "non-discern ible" at best, which is insignificant.)