Fire-Rated Reward Wall Systems

TYPE & FIRE-RESISTIVE RATING	FORM TYPE	INTERIOR WALL FINISH [2,3]	MINIMUM STEEL REINFORCEMENT[4]
Bearing wall: 4 hr. BW 500 [1, 9]	eForm 11" width	Not required for fire-resistance assembly rating [5]	Vertical: #5, 12" o.c. in vertical cores Horizontal: #5, 16" o.c. in horizontal cores
Bearing wall: 3 hr. BW 501 [1, 9]	eForm 9.25"	Required for fire-resistive assembly rating: 5/8" Type X gypsum wallboard, fastened 12" o.c. in field and 8" o.c. at perimeter	Vertical: #5, 24" o.c. in vertical cores Horizontal: #5 24" o.c. in horizontal cores
Nonbearing wall: 4 hr. NBW 500 [7, 9]	eForm 11" width	Not required for fire-resistance assembly rating [5]	Not required for fire-resistance rating [6]
Nonbearing wall: 3 hr. NBW 501 [7, 9]	eForm 9.25" width	Required for fire-resistive assembly rating: 5/8" Type X gypsum wallboard, fastened 12" o.c. in field and 8" o.c. at perimeter	Not required for fire-resistance rating [6]
Bearing Wall: 4 hr. BW 510 [1, 9]	iForm 15" width	Not required for fire-resistance assembly rating [5]	Vertical: #5, 12" o.c. in vertical cores Horizontal: #5, 16" o.c. in horizontal cores
Bearing wall: 4 hr. BW 502 [1, 9]	iForm 13" width	Not required for fire-resistance assembly rating [5]	Vertical: #5, 12" o.c. in vertical cores Horizontal: #5, 16" o.c. in horizontal cores
Bearing wall: 3 hr. BW 503 [1, 9]	iForm 11" width	Not required for fire-resistance assembly rating [5]	Vertical: #5, 24" o.c. in vertical cores Horizontal: #5, 24" o.c. in horizontal cores
Bearing wall: 1 hr. BW 504 [7, 9]	iForm 9" width	Not required for fire-resistance assembly rating [5]	Vertical: #5, 24" o.c. in vertical cores Horizontal: #5, 24" o.c. in horizontal cores
Bearing wall: 2 hr. BW 505 [8, 9]	iForm 9" width	Not required for fire-resistance assembly rating [5]	Vertical: #5, 24" o.c. in vertical cores Horizontal: #5, 24" o.c. in horizontal cores
Bearing wall: 2 hr. BW 506 [7, 9]	iForm 9" width	Required for fire-resistive assembly rating: ½" Type X gypsum wallboard, fastened 12" o.c. in field and 8" o.c. at perimeter on both sides	Vertical: #5, 24" o.c. in vertical cores Horizontal: #5, 24" o.c. in horizontal cores
Nonbearing wall: 4 hr. NBW 510 [7, 9]	iForm 15" width	Not required for fire-resistance assembly rating [5]	Not required for fire-resistance rating [6]
Nonbearing wall: 4 hr. NBW 502 [7, 9]	iForm 13" width	Not required for fire-resistance assembly rating [5]	Not required for fire-resistance rating [6]
Nonbearing wall: 3 hr. NBW 503 [7, 9]	iForm 11" width	Not required for fire-resistance assembly rating [5]	Not required for fire-resistance rating [6]
Nonbearing wall: 1 hr. NBW 507 [7, 9]	iForm 9" width	Not required for fire-resistance assembly rating [5]	Not required for fire-resistance rating [6]
Nonbearing wall: 2 hr. NBW 508 [8, 9]	iForm 9" width	Not required for fire-resistance assembly rating [5]	Not required for fire-resistance rating [6]
Nonbearing wall: 2 hr. NBW 509 [7, 9]	iForm 9" width	Required for fire-resistive assembly rating: ½" Type X gypsum wallboard, fastened 12" o.c. in field and 8" o.c. at perimeter on both sides	Not required for fire-resistance rating [6]

[1]The Reward Wall System must be constructed with normal-weight concrete wall having a minimum compressive strength of 3,000 psi (20.6 Mpa) at 28 days.
[2]The layer of gypsum wallboard required to achieve the hourly rating must be attached to the interior face of the exterior Reward wall, and to both sides of an interior Reward wall. The wallboard must be fastened with 1 ¼-inch-long (31.7 mm) drywall screws, spaced 8 inches (203 mm) on center. Joints in the wallboard must be treated with joint tape and compound.
[3]An exterior wall covering is required. An approved exterior wall covering permitted by the code or recognized in a current evaluation report, applied to the exterior side of the Reward Wall System, will not diminish the fire-resistive rating of the wall assembly.
[4]Reinforcement for the structural design must comply with the building code. Greater reinforcement dimensions and closer spacing patterns are acceptable. Lesser reinforcement dimensions and wider spacings are acceptable when design loads are less than the rated load
[5]An approved thermal barrier is required to separate the interior of the building, such as ½-inch thick regular gypsum wallboard, fastened 12 inches o.c. in the field and 8 inches o.c. at the perimeter.
[6]Structural reinforcement must be placed in accordance with the structural calculations as required by the building code.
[7]Concrete must be salacious aggregate, carbonate aggregate, sand-lightweight, or lightweight concrete, having a minimum 3,000 psi compressive strength.
[8]Concrete must be sand-lightweight or lightweight concrete, having a minimum 3,000 psi compressive strength.
[9]Fire rating design listings and numbers by Omega Point Laboratories, Inc.