

APPENDIX

Introduction

The fire resistance tables that follow are a part of Resource A and provide a tabular form of assigning fire resistance ratings to various archaic building elements and assemblies.

These tables for archaic materials and assemblies do for archaic materials what Tables 720.1(1), 720.1(2), and 720.1(3) of the *International Building Code* do for more modern building elements and assemblies. The fire resistance tables of Resource A should be used as described in the “Purpose and Procedure” that follows the table of contents for these tables.

RESOURCE A TABLE OF CONTENTS

Purpose and Procedure		149	
Section I—Walls			
1.1.1	Masonry	0 in. - 4 in. thick	150
1.1.2	Masonry	4 in. - 6 in. thick	154
1.1.3	Masonry	6 in. - 8 in. thick	163
1.1.4	Masonry	8 in. - 10 in. thick	169
1.1.5	Masonry	10 in. - 12 in. thick	178
1.1.6	Masonry	12 in. - 14 in. thick	182
1.1.7	Masonry	14 in. or more thick	189
1.2.1	Metal Frame	0 in. - 4 in. thick	192
1.2.2	Metal Frame	4 in. - 6 in. thick	196
1.2.3	Metal Frame	6 in. - 8 in. thick	198
1.2.4	Metal Frame	8 in. - 10 in. thick	199
1.3.1	Wood Frame	0 in. - 4 in. thick	200
1.3.2	Wood Frame	4 in. - 6 in. thick	201
1.3.3	Wood Frame	6 in. - 8 in. thick	209
1.4.1	Miscellaneous Materials	0 in. - 4 in. thick	209
1.4.2	Miscellaneous Materials	4 in. - 6 in. thick	210
1.5.1	Finish Ratings—Inorganic Materials	Thickness	211
1.5.2	Finish Ratings—Organic Materials	Thickness	212
Section II—Columns			
2.1.1	Reinforced Concrete	Min. Dim. 0 in. - 6 in.	213
2.1.2	Reinforced Concrete	Min. Dim. 10 in. - 12 in.	213
2.1.3	Reinforced Concrete	Min. Dim. 12 in. - 14 in.	217
2.1.4	Reinforced Concrete	Min. Dim. 14 in. - 16 in.	218
2.1.5	Reinforced Concrete	Min. Dim. 16 in. - 18 in.	219
2.1.6	Reinforced Concrete	Min. Dim. 18 in. - 20 in.	221
2.1.7	Reinforced Concrete	Min. Dim. 20 in. - 22 in.	222
2.1.8	Hexagonal Reinforced Concrete	Diameter - 12 in. - 14 in.	223
2.1.9	Hexagonal Reinforced Concrete	Diameter - 14 in. - 16 in.	224

RESOURCE A

2.1.10	Hexagonal Reinforced Concrete	Diameter - 16 in.- 18 in.	224
2.1.11	Hexagonal Reinforced Concrete	Diameter - 20 in. - 22 in.	224
2.2	Round Cast Iron Columns	Minimum Dimension	225
2.3	Steel—Gypsum Encasements	Minimum Area of Solid Material	226
2.4	Timber	Minimum Dimension	227
2.5.1.1	Steel/Concrete Encasements	Minimum Dimension less than 6 in.	227
2.5.1.2	Steel/Concrete Encasements	Minimum Dimension 6 in. - 8 in.	228
2.5.1.3	Steel/Concrete Encasements	Minimum Dimension 8 in. - 10 in.	229
2.5.1.4	Steel/Concrete Encasements	Minimum Dimension 10 in. - 12 in.	231
2.5.1.5	Steel/Concrete Encasements	Minimum Dimension 12 in. - 14 in.	236
2.5.1.6	Steel/Concrete Encasements	Minimum Dimension 14 in. - 16 in.	238
2.5.1.7	Steel/Concrete Encasements	Minimum Dimension 16 in. - 18 in.	239
2.5.2.1	Steel/Brick and Block Encasements	Minimum Dimension 10 in. - 12 in.	240
2.5.2.2	Steel/Brick and Block Encasements	Minimum Dimension 12 in. - 14 in.	240
2.5.2.3	Steel/Brick and Block Encasements	Minimum Dimension 14 in. - 16 in.	241
2.5.3.1	Steel/Plaster Encasements	Minimum Dimension 6 in. - 8 in.	241
2.5.3.2	Steel/Plaster Encasements	Minimum Dimension 8 in. - 10 in.	242
2.5.4.1	Steel/Miscellaneous Encasements	Minimum Dimension 6 in. - 8 in.	242
2.5.4.2	Steel/Miscellaneous Encasements	Minimum Dimension 8 in. - 10 in.	242
2.5.4.3	Steel/Miscellaneous Encasements	Minimum Dimension 10 in. - 12 in.	243
2.5.4.4	Steel/Miscellaneous Encasements	Minimum Dimension 12 in. - 14 in.	243
Section III—Floor/Ceiling Assemblies			
3.1	Reinforced Concrete	Assembly thickness	244
3.2	Steel Structural Elements	Membrane thickness	250
3.3	Wood Joist	Membrane thickness	257
3.4	Hollow Clay Tile with Reinforced Concrete	Assembly thickness	262
Section IV—Beams			
4.1.1	Reinforced Concrete	Depth - 10 in. - 12 in.	265
4.1.2	Reinforced Concrete	Depth - 12 in. - 14 in.	268
4.1.3	Reinforced Concrete	Depth - 14 in. - 16 in.	270
4.2.1	Reinforced Concrete/Unprotected	Depth - 10 in. - 12 in.	271
4.2.2	Steel/Concrete Protection	Depth - 10 in. - 12 in.	271
Section V—Doors			
5.1	Resistance of Doors to Fire Exposure	Thickness	272