

CITY OF HARRINGTON
ORDINANCE NO. 15-02

AN ORDINANCE REPEALING AND REPLACING CHAPTER 102, BUILDING STANDARDS, OF THE CODE OF THE CITY OF HARRINGTON TO ADOPT THE 2012 INTERNATIONAL BUILDING AND RESIDENTIAL CODES

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF HARRINGTON IN COUNCIL MET:

Section 1. That Chapter 102 shall be amended by deleting the existing chapter and substituting in lieu thereof the following:

Chapter 102, Building Standards

Article I. Adoption of Building Standards.

§ 102-1. Adoption of International Building Code.

That a certain document, two copies of which are on file in the office of the Clerk of Council of the City of Harrington, being marked and designated as the *International Building Code*, 2012 edition, be and is hereby adopted as the Building Code of the City of Harrington for regulating and governing the conditions and maintenance of all property, buildings, and structures, by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations; provisions, penalties, conditions, and terms of said Building Code on file in the office of the City of Harrington and hereby referred to, adopted, and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes, if any, prescribed in § 102-2.

§ 102-2. Revisions.

The following sections are hereby revised:

- A. Section 101.1. Insert: City of Harrington.
- B. Section 113.1 is revised by deleting the section in its entirety and substituting the following:

113.1 General. The City Council shall hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code.

- C. Section 113.3 is revised by deleting the section in its entirety.
- D. Section 1612.3. Insert: City of Harrington and with the most recently enacted.
- E. Section 3412.2. Insert: the effective date of the adoption of this Code.

Article II. Adoption of Residential Standards.

§ 102-3. Adoption of International Residential Code.

That a certain document, two copies of which are on file in the office of the Clerk of Council of the City of Harrington, being marked and designated as the *International Residential Code*, 2012 edition, including Appendix Chapters G, J, and M, be and is hereby adopted as the Residential Code of the City of Harrington for regulating and governing the construction, alteration, movement, enlargement, replacement, repair, equipment, location, removal, and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with separate means of egress as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions, and terms of said Residential Code on file in the office of the City of Harrington are hereby referred to, adopted, and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes, if any, prescribed in § 102-4.

§ 102-4. Revisions.

The following sections are hereby revised:

- A. Section R101.1. Insert: City of Harrington.
- B. Section R112.1 is revised by deleting the section in its entirety and substituting the following:

R112.1 General. The City Council shall hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code.

- C. Section R112.3 is revised by deleting the section in its entirety.

D. Table R301.2(1). Insert:

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^e SUMMER Wet bulb/Dry bulb	ICE BARRIER UNDER- LAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j	ASSUMED SOIL BEARING
	Speed ^d (mph)	Topographic Effects ^k		Weathering ^a	Frost line depth ^b	Termite ^c						
25	90	No	A & B	Severe	24"	Moderate To heavy	18 89/75	No	06/01/1977 07/07/2014 330 07/07/2014 337 07/07/2014 341 07/07/2014	325	56.2	2000 psf

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s

- Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map Figure R301.2(3). The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure 301.2(4)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- The outdoor design dry-bulb temperature shall be selected from the columns of 97 ½ - percent values for winter from Appendix D of the International Plumbing Code. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- The jurisdiction shall fill in this part of the table with the Seismic Design Category determined from Section R301.2.2.1.
- The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- In accordance with Sections R905.2.7.1, R905.4.3, R905.5.3, R905.6.3, R905.7.3 and R905.8.3, for areas where the average daily temperature in January is 25° F (-4° C) or less, or where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.
- The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.
- In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- Including all subsequent amendments and/or the most current revision thereof.

- E. Section R302.2 is revised by deleting the exception in its entirety and substituting the following:

Exception: A common 2-hour fire-resistance-rated wall is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. Electrical installations shall be installed in accordance with Chapters 33 through 42. Penetrations of electrical outlet boxes shall be in accordance with Section R317.3.

- F. Section R311.7.5 is revised by deleting the section in its entirety and substituting the following:

R311.7.5 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section all dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.

R311.7.5.1 Risers. The maximum riser height shall be 8-1/4 inches (209.6 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). The riser height at landings with hinged doors shall be measured from the landing vertically to the top of the threshold (not the compression strip). The riser height at landings with sliding doors shall be measured from the landing vertically to the top of the highest projection of the door track. Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the opening between treads does not permit the passage of a 6-inch-diameter (102 mm) sphere.

Exception: The opening between adjacent treads is not limited on stairs with a total rise of 8 – 1/4 inches (209.55 mm) or less.

R311.7.5.2 Treads. The minimum tread depth shall be 9 inches (229 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

- G. Section R313 is revised by deleting the section in its entirety.

H. A new section shall be added to read as follows:

Section R614 Post Frame Buildings

R614.1 Definitions.

POST FRAME BUILDING. A structural building frame consisting of a wood truss or rafters connected to vertical timber columns or sidewall posts, which function as the principal gravity and load resisting elements of the building. A building used for motor vehicles is considered a garage and must meet the requirements in section R309 as well as Section 614 of this code.

614.2 Plan Submittals.

R614.2.1 Design loads. Plans are required to meet the minimum design loads noted in Table R301.2(1). Uplift reaction forces involved are required to be provided.

R614.2.2 Truss design drawings. Truss design drawings are required at the time of plan submittal. The building plans should specify the permanent bracing for cords and webs to meet the bracing requirements shown on the truss design drawings.

R614.2.3 Size, grade, and species of wood members. All lumber shown on the submitted drawings should identify the size, grade and species or species group. Any engineered lumber should be identified by the product name, size and stress grade.

R614.2.4 Isolation of siding. Methods and materials to isolate steel siding from preservatively treated lumber should be specified and detailed on the submitted plans.

R614.2.5 Connection of truss carrier to bearing post. Submitted plans shall specify a bearing notch, properly designed bearing block, or other means for positive load transfer.

R614.2.6 Fastener schedule. Submitted plans are required to include a fastener schedule completely describing the fasteners and quantities required at each connection. Power driven nails should specify the type, diameter and length.

R614.2.7 Roofing and siding diaphragms. Submitted plans shall include metal roof and wall panel thickness, fastener type and size, and the fastener pattern for roof and siding panels. If stitch screws are

required to attach metal sheet -to-sheet, the plans should show the locations. Shingled roofs shall meet the requirements of Section R905.

R614.3 Footings

R614.3.1 Footing depth. Footings for post frame structures shall extend a minimum of 40 inches (914 mm) below grade.

R614.3.2 Footing size. Footings for all post frame structures shall be sized to support the loads imposed. Minimum footing sizes for all post frame structures shall be 18 inches (457 mm) diameter and a minimum of 12 inches (203 mm) thick concrete under the support posts.

R614.3.3 Resistance to uplift. A lumber cleat shall be attached to the bottom of all vertical support posts to resist uplift.

Exception: Other means to resist uplift may be used and should be noted on the submitted plans.

R614.4 Frame Construction

R614.4.1 Preservative treatment. All wood in contact with the ground shall be preservatively treated meeting the requirements of Section R319.

R614.4.2 Support posts. Support posts fabricated from multiple plies shall have the number of plies of lumber, lumber species, grade, and connection system between plies noted.

R614.4.3 Truss carrier spans. The allowable spans for truss carriers fabricated of dimensional lumber shall not exceed the values set forth in Tables R614.4.4(1) through R614.4.4(3). Spans exceeding the values set forth in Tables R614.4.4(1) through R614.4.4(3) shall be engineered.

Table R614.4.4(1)
Truss Carrier Spans
48" O.C. Support Post Spacing

Truss Spacing	Header Supporting ^a	(2)2x6	(2)2x8	(2)2x10	(2)2x12
		lbs ^b	lbs ^b	lbs ^b	lbs ^b
24"	Douglas fir - Larch	1201	1584	2021	2458
	Hem - fir	948	1250	1595	1940
	Southern yellow pine	1138	1500	1914	2328
	Spruce - pine - fir	885	1167	1489	1811

Table R614.4.4(2)
Truss Carrier Spans
72" O.C. Support Post Spacing

Truss Spacing	Header Supporting ^a	(2)2x6	(2)2x8	(2)2x10	(2)2x12
		lbs ^b	lbs ^b	lbs ^b	lbs ^b
24"	Douglas fir - Larch	862	1186	1513	1841
	Hem - fir	710	936	1195	1450
	Southern yellow pine	851	1124	1434	1744
	Spruce - pine - fir	663	874	1115	1356
36"	Douglas fir - Larch	1130	1584	2021	2458
	Hem - fir	948	1250	1595	1940
	Southern yellow pine	1138	1500	1914	2328
	Spruce - pine - fir	885	1167	1489	1711

Table R614.4.4(3)
Truss Carrier Spans
96" O.C. Support Post Spacing

Truss Spacing	Header Supporting ^a	(2)2x6	(2)2x8	(2)2x10	(2)2x12
		lbs ^b	lbs ^b	lbs ^b	lbs ^b
24"	Douglas fir - Larch	487	782	1162	1413
	Hem - fir	460	719	917	1115
	Southern yellow pine	654	862	1100	1339
	Spruce - pine - fir	474	671	856	1041
48"	Douglas fir - Larch	847	1360	2021	2458
	Hem - fir	800	1250	1595	1940
	Southern yellow pine	1138	1500	1914	2328
	Spruce - pine - fir	824	1167	1489	1811

a. Tabulated values assume #2 grade lumber

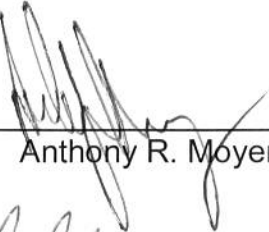
b. Truss reactions = Total load.

- I. Chapter 11, Energy Efficiency, is revised by deleting the chapter in its entirety and referring to the currently adopted Delaware State Energy Code.
- J. Part VII, Plumbing, is revised by deleting the part in its entirety and referring to the currently adopted Delaware State Plumbing Code.
- K. Part VIII, Electrical, is revised by deleting the part in its entirety and referring to the currently adopted Delaware State Electrical Code.
- L. Appendix G, Swimming Pools, Spas, and Hot Tubs is hereby adopted.
- M. Appendix J, Existing Buildings and Structures, is hereby adopted.
- N. Appendix M, Home Day Care – R-3 Occupancy, is hereby adopted.

Repealer. All ordinances and parts of ordinances inconsistent with the provisions of this Ordinance are hereby repealed.

Effective Date. The Clerk of Council shall certify to the adoption of this Ordinance and cause the same to be published as required by law; and this Ordinance shall take effect and be in force beginning May 1, 2015.

SO ORDAINED by the majority of Council Members present at a regular session of Harrington City Council, to be effective upon signing.



Anthony R. Moyer, Mayor

Attest: 

Kelly Blanchies, Clerk of Council

Date of Adoption: March 16, 2015

SYNOPSIS

This Ordinance replaces Chapter 102, Building Standards, to adopt the 2012 International Building and Residential Codes and to delete additional handicapped parking requirements previously listed in the chapter. The International Building Code is amended to insert information specific to Harrington. The International Residential Code is amended to insert information specific to Harrington and to adopt standards similar to Kent County, as outlined in the Kent County Supplement to the International Building Code/2012 and International Residential Code/2012, effective October 1, 2014. This replaces the previously adopted 2006 editions of the International Building and Residential Codes and becomes effective on May 1, 2015.

First Reading: March 2, 2015

Public Hearing: March 16, 2015

Second Reading: March 16, 2015