TOWN OF CHARLESTOWN

REQUIREMENTS FOR BUILDING PERMITS
RESIDENTIAL SINGLE FAMILY

ADDITIONS

BUILDING PERMIT APPLICATIONS FOR NEW ADDITIONS MUST BE ACCOMPANIED BY THE FOLLOWING ITEMS, PRIOR TO ACCEPTANCE OF THE APPLICATION FOR PLAN REVIEW.

1. **Own the property.**

2. **Contractor Verification or Owner Affidavit**

3. **Three (3) sets of building plans to scale, to include:**

a. foundation plan	d. framing plan
b. existing floor plan	e. cross sections
c. proposed floor plan	f. elevations

4. **A Plot Plan** - To scale, showing distance of foundation, overhangs, decks, and septic system from all property lines and the survey markers on all corners of said lot.

5. **Fire Marshal**

    1. Charlestown Fire District (364-9117) – The Fire Chief will inspect the detectors at the site during rough inspection.

    2. Dunn's Corner (322-0577) – The Fire Marshal must approve and stamp plans prior to submittal to the Building Officials Office.

6. Wind Design

R301.2.1.1 **Design Criteria.** Construction in regions where the basic wind speeds from Figure R301.2(1) equal or exceed 110 miles per hour (177.1 km/h) shall be designed in accordance with one of the following. (Note: Charlestown is in a 110 and 120 mile per hour zone. South of Route 1 is the 120 zone, remainder is the 110 zone.)

1. American Forest and Paper Association (AF&PA) Wood Frame Construction Manual for One and Two Family Dwellings (WFCM); or

2. Southern Building Code Congress International Standard for Hurricane Resistant Residential Construction (SSTD 10); or

3. International Code Council (ICC) Standard for Residential Construction in High Wind Regions (ICC-600); or

4. Hurricane Resistant Residential Construction (SSTD 10); or Minimum Design Loads for Buildings and Other Structures (ASCE-7);

5. Cold-formed steel construction shall be designed in accordance with the provisions of this code. (SBC-2-2013)

6. Concrete construction shall be designed in accordance with the provisions of this code. (SBC-2-2013)

7. Structural insulated panel (SIP) walls shall be designed in accordance with the provisions of this code. (SBC-2-2013)

8. For all communities located in the 110 MPH and 120 MPH wind zones, the prescriptive criteria in Appendix AA may be used for buildings and structures in lieu of items 1-3 above:
(see Appendix AA pages 5-9)

Your building plans must indicate how Appendix AA is being met with materials or sections noted on your building plan.

7. **Engineered Lumber, Beams & Trusses**

   If the plans have trusses (floor or roof), micro lam LVL beams, steel girders or other engineered beams, all calculations and plans must be submitted with the building permit application.

   If plans have unusual structural design, an Engineer or Architect must stamp said plans.

8. **Energy Code Compliance** – To comply with the 2013 Energy Conservation Code your application must include a Res-Check or a detail illustrating compliance with the Energy Conservation Code. (see 2013 Energy Code Handout pages 10-13)

9. **Flood Zone Engineering** – All construction in a Flood Zone must comply with section R322 of the SBC-2-2013. A registered Design Professional shall prepare and seal documentation of the elevations. If located in a high-velocity flood zone (V Zone), your application must include a certificate prepared by a registered design professional that the building is designed in accordance with ASCE 24-05.

10. **DEM/Coastal**

    I. System Suitability Determination from DEM may be required for your septic system (see Pages 14 - 16)

    II. If your construction is near a fresh water stream, pond, swamp or other fresh water wetland, you must get a Fresh Water Wetlands Determination. (222-6820)

    III. If your construction is within 200 feet of a coastal feature, you must obtain a Coastal Resources Management Assent. (783-3370)

11. **Zoning Board**

    I. If your building request requires a Variance or Special Use Permit from the Zoning Board, this approval must be acquired prior to acceptance of your application for plan review.

ALL OF THE ABOVE ARE GENERAL REQUIREMENTS. OTHER APPROVALS OR SPECIFICATIONS MAY BE NEEDED FOR CERTAIN SITUATIONS.

IF YOU HAVE ANY ADDITIONAL QUESTIONS, PLEASE FEEL FREE TO CALL US AT 364-1215.

This office would further advise you to keep your septic system design for future reference, and if your property is surveyed, to install permanent markers such as concrete bounds or iron pipes at the time of the survey as the oak stakes rot away or are pulled up. You have paid for the survey once, why pay again?

All Building Permits issued require a Certificate of Occupancy and/or Use. In order to obtain a Certificate of Occupancy and Use you must call this office for the **final inspection**, the structure must be complete and you must obtain a final inspection from the fire chief or Fire Marshal, a Certificate of Conformance from DEM and a well water test per the RI Department of Health.

If you occupy or use a structure without a Certificate of Occupancy and Use and someone is injured on said property or a loss occurs, you may not be covered by your insurance, and further it is a violation of the Rhode Island State Law.

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Appendix AA

AA101.1 **General.** This appendix contains prescriptive solutions for compliance on wind path load transfer requirements, and shall be used only within the limitations of Section AA101.2.

AA101.2 **Conditions of Use.** The prescriptive solutions specified in the following sections shall not be permitted to be used in the following conditions:

1. Buildings and structures of any size in 110 MPH or 120 MPH wind zones located in a V zone as determined by community FIRMS.

2. Two or more story buildings and structures of any size located in 120-MPH wind zone with more than 20% exterior fenestration. [Fenestration – Skylights, roof windows, vertical windows (whether fixed or moveable); opaque doors; glazed doors; glass block; and combination opaque/glazed doors.]

3. Two or more story structures with a building height greater than 33' as measured from Grade Plane to the average height of the highest roof surface.

4. Any two or more story structure or building with opening fenestration greater than 40% on any one wall.

AA202 Roofs

AA202.1 **Scope.** The following applies to structures conventionally framed or to truss-type roofs.

AA202.2 **Roof Sheathing.** Roof Sheathing shall be not less than 7/16" finished thickness.

AA202.3 **Roof Nailing.** Roof attachment shall be accomplished with minimum 8d nails as follows:

1. In the 4-foot perimeter edge zone along the edges: 6" o/c.

2. To the intermediate supports within the 4-foot perimeter edge zone: 6" o/c.

3. Along the gable end wall or rake: 4" o/c.

4. All other areas: 6" o/c edge; 12" o/c intermediate.

All Sheathing edges within the 4-foot perimeter edge zone shall be blocked with 2x3 minimum including the ridge line and soffit/fascia area. Provisions for ventilation air shall be maintained.

Exception: 2 x 3 intermediate blocking can be eliminated provided all sheathing is 5/8" nominal tongue and grove structural panels (Blocking is still required at the ridge & soffit.)

AA202.4 **Ridge Straps.** Ridge straps 1-1/4" x 20 gauge shall be attached to each pair of opposing rafters with 5-8d nails at each end into the framing member.

Exceptions:

1. Ridge straps are not required when collar ties of nominal 1 x 6 or 2 x 4 lumber are located within the upper third of the attic space and attached to each rafter with 3-10d nails.

2. Trusses without a framed ridge connection.

3. Plywood gussets of equivalent cross-section.

4. Other engineered connections.

5. At hips, straps shall be installed so each hip jack is connected across the hip line with at least 1-8d into an opposite framing member.

AA202.5 **Rake and Eave Overhangs.** Overhangs shall be limited to 24". Ladder style rake overhangs attached to the gable end walls shall be limited to 12". Cantilevered rake overhangs at gable end walls shall be limited to 24".

AA202.6 **Roof Assembly to Wall Assembly.** A design wind load suction of 25 psf shall be used in conjunction with Table R802.11 to establish the required strength of rafter tie-down connections to withstand wind uplift forces.

Exception: Roof truss to wall connection shall be designed to withstand either the load requirements of Table R802.11 or the connection loads indicated on the truss design shop drawings, whichever is greater.

AA203 Walls

AA203.1 **Wall Sheathing.** Wall Sheathing shall be a minimum 7/16" structural panel. Nailing shall be in accordance with Table R602.3(1) and the following:

1. At the top plate or plates, the sheathing shall extend from the top of the top plate to a minimum of 16" beyond the stud-to-bottom of the top plate connection. A minimum of 4 nails shall be used at each stud fastening and edge-nailed to each plate at 6" o/c.

   Alternate: Prefabricated and pre-engineered connection straps approved by the Building Official.

2. If the studs are not continuous to the foundation plate such as at an intermediate floor, the wall sheathing shall be continuous and uninterrupted for a distance of 16" beyond from top of bottom wall plate to 16" beyond bottom of bottom wall top plate below, with a minimum of 4 nails at each stud, and field-nailed at 6" o/c to floor joist header framing.

   Alternate: Prefabricated and pre-engineered connection anchors or fasteners approved by the Building Official.

3. At the bottom of the wall assembly to the foundation sill plate, the wall sheathing shall be continuous from a point 16" above the top of the bottom wall plate to the bottom of the foundation sill, with a minimum of 4 nails at each stud, 6" field nailed and edge nailed to the foundation sill plate at 6" o/c.

   Alternate: Prefabricated pre-engineered connection anchors or fasteners approved by the Building Official.

AA203.2 **Shear Walls.** A 4' segment of wall sheathing shall be designated as a shear wall at each corner of the structure at each floor, and no more than 24' apart along a wall length. The following additional requirements apply:

1. No openings are permitted within this 4' section.

   Exception: Window openings are allowed no closer than 2' to corner providing the length of that shear panel is increased to 8'.

2. All edges shall be blocked and nailed at 6" o/c and field nailed at 6" o/c.

3. Studs shall be doubled at each end of the shear wall panel.

AA203.2.1 **Shear Wall Hold-downs.** 1st story shear walls shall be connected to the foundation below with connection anchoring capable of 3500 lb. hold-down capacity in addition to conventional foundation anchor bolt requirements in the remainder of the panel. The hold-downs shall be fastened to each end of the shear wall at the double stud.

Exceptions:

1. Shear wall hold-downs shall not be required in wind zones I or II (100 mph or 110 mph). (See attached map)

2. Shear wall anchors shall not be required provided ½" anchor bolts at 48" o/c max are installed with the top of the bolts anchored through the floor system to the bottom plate of the exterior wall frame for the entire foundation perimeter.

AA203.3 **Foundation Anchor Bolts.** Anchor bolts shall be installed in accordance with Section R403.1.6 and the following:

1& 2 story buildings: ½" @ 48" o/c or
5/8" @ 72" o/c

3 story building: ½" @ 24" o/c or
5/8" @ 36" o/c

Alternate: Prefabricated and pre-engineered connections in design and quantity sufficient to equal strength of anchor bolt specifications above.

Exception: See exception #2 to AA203.2.1 above.

AA203.4 Wall Framing.

AA203.4 1. For wind zone 2 (110 mph) and zone 3 (120 mph) the following conditions apply:

1. Exterior bearing and non-bearing walls greater than 10' in height shall be 2 x 6 @ 16" o/c min.
2. Walls with a total height greater than 10' shall be permitted to use 2 x 4 @ 16" o/c providing the wall is limited to 10' in length and the individual studs are not greater than 9' in length.

AA203.4.2. Garage doors. In wind zone 3 (120) mph garage doors shall be limited to 9' x 8' nominal.

AA 204 Deviations.

AA204.1 **Deviations**. Deviations from the above prescriptive requirements shall only be permitted if stamped calculations and drawings are provided by a Rhode Island registered professional engineer for alternative connections.

2013 Residential
Energy Conservation Requirements

The following is an overview of some of the new requirements of the 2013 Residential Energy Conservation Code. There are other requirements, **not listed,** that may affect your project and can be found in the 2013 Energy Conservation Code.

3 Methods of Compliance

#1- Meet the requirements of SBC-8-2013 (Energy Conservation Code)
(see Page 2 and mandatory requirements below)

#2- Res-Check for Zone 5 & Mandatory requirements
(see http://www.energycodes.gov/rescheck and mandatory requirements below)

#3- Meeting the requirements of Chapter 11 of the IRC 2013 for climate zone 5

Prior to acceptance of your plans for review, your application must be accompanied by a detail illustrating compliance with the Energy Conservation Code or a Res-Check.

All 3 methods must also comply with the Mandatory Requirements Below!

Mandatory Requirements:

401.3 Energy Certificate – A permanent energy certificate shall be posted at the electric panel (see pg. 3)
402.4 Air Leakage
1 – Visual inspection by the Building Department of all items in table 402.4.2 (see page 4)
2 – **Blower door testing by an approved third party** (Report must be submitted to the Building Department prior to the issuance of a CO
402.4.2 Fireplaces – New wood burning fireplaces shall have gasketed doors and outdoor combustion air
402.4.4 Recessed Lighting – All recessed lights must be IC rated, air tight and sealed to drywall/ceiling and have an air leakage rate of not more than 2.0 cfm. Exception: Fixtures completely in conditioned space
403.1.1 Programmable Thermostat – One programmable thermostat required for forced-air heating system
403.2.2 Ducts (Sealing) Duct sealing and tightness must be verified by either:
1 – Post construction test or
2 – Rough in test
Exception: Testing not required if air handler and all ducts are located in conditioned space
403.3 Mechanical Piping – Piping capable of carrying fluids above 105* F or below 55* F shall be insulated to a minimum of R3
403.4 Hot Water Piping – All circulating service hot water piping shall be insulated to a minimum of R3 and shall include an automatic or readily accessible switch to turn off the pump when not in use
403.5 Mechanical Ventilation – Outdoor air intakes and exhausts shall have automatic or gravity dampers
403.6 Equipment Sizing – Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with Manual J.

Energy Conservation Code

TABLE 402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (note a)

Climate Zone	Fenes-Tration U-Factor Note b	Skylight U-Factor Note b	Glazed Fenes-Tration SHGC Note b	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value Note g	Floor R-Value	Basement Wall R-Value Note c	Slab R-Value & Depth Note d	Crawl Space Wall R-Value
5	0.35	0.60	NR	38	20 or 13 +5 Note f	13/17	30 Note e	10/13	10 2 ft	10/13

For SI: 1 foot = 304.8 mm.
a. *R*-values are minimums *U*-factors and SHGC are maximums. R-19 batts compressed into a nominal 2 × 6 framing cavity such that the *R*-value is reduced by R-1 or more shall be marked with the compressed batt *R*-value in addition to the full thickness *R*-value.
b. The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
c. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
d. R-5 shall be added to the required slab edge *R*-values for heated slabs.
e. Or insulation sufficient to fill the framing cavity, R-19 minimum.
f. "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, insulating sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25 percent of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.
g. The second *R*-value applies when more than half the insulation is on the interior of the mass wall.

See Section 402 of the 2013 Energy Conservation Code for U-Factor and Total UA Alternatives.

Additional Requirements

402.2.4 Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weather-stripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation.

402.2.7 Floors. Floor insulation shall be installed to maintain permanent contact with the underside of the subfloor decking.

402.2.8 Basement walls. Walls associated with conditioned basements shall be insulated from the top of the basement wall down to 10 feet below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall meet this requirement unless the floor overhead is insulated in accordance with Table 402.1.1 and Section 402.2.6

403.2.1 Duct insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

Exception: Ducts or portions thereof located completely inside the building thermal envelope.

404.1 Lighting equipment. A minimum of 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficiency lamps or a minimum of 75 percent of the permanently installed fixtures shall contain only high efficacy lamps.

401.3 Certificate. A permanent certificate shall be completed and posted on or in the electrical distribution panel by the builder or registered design professional. The certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall list the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, crawlspace wall and/or floor) and ducts outside conditioned spaces; U-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration, and the results from any required duct system and building envelope air leakage testing done on the building. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired unvented room heater", "electric furnace" or "baseboard electric heater," as appropriate. An efficiency shall not be listed for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.

Energy Certificate

Street Address:_____

Town:_____

Predominant Values:

R Value Ceiling/Roof _____
R Value Walls _____
R Value Foundation _____
R Value Ducts _____
U Factor Fenestration _____
SHGC Fenestration _____
U Factor Skylights _____
SHGC Skylights _____

Efficiency and Type of Heating Equipment _____

Efficiency and Type of Cooling Equipment _____

Efficiency and Type of Service Water Heater _____

Gas Fired Un-Vented Room Heater Installed Yes / No

Baseboard Electric Heater Installed Yes / No

Electric Furnace Installed Yes / No

Certificate completed by Builder/Registered Design Professional _____
Signature

All items in Table 402.4.2 below must be visually inspected by the Building Department during construction.

TABLE 402.4.2
AIR BARRIER AND INSULATION COMPONENT CRITERIA

COMPONENT	CRITERIA
Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.
Ceiling/Attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access openings, drop down stair or knee wall doors to unconditioned attic spaces shall be sealed.
Walls	Corners and headers shall be insulated and the junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.
Windows and Doors	The space between window/door jambs and framing and skylights and framing shall be sealed.
Rim Joists	Rim joists shall be insulated and include the air barrier.
Floors (including above garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation.
Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
Shafts, Penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.
Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to drywall.
Plumbing and Wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/Tub on exterior wall	Exterior walls adjacent to showers and tubs shall be insulated and the air barrier installed separating them from the showers and tubs.
Electrical/Phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air sealed boxes shall be installed.
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.
Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors.

RI Department of Environmental Management

System Suitability Requirements (Rule 17)

17.4 <u>OWTS Suitability Determination</u>- An OWTS Suitability Determination is a determination as to whether or not an existing OWTS is suitable for a proposed building construction, renovation or change of use so as to protect public health and the environment. An OWTS Suitability Determination Application may be submitted to the Department in order to determine the applicability of this Rule. OWTS suitability is determined by the following:

17.4.1 Excluding holding tanks, for OWTSs where all components have been installed with state approval on or after April 9, 1968:

(A) The OWTS is suitable and no application to the Department is necessary for any building construction, renovation or change in use, that, for residential uses, does not result in an increase in the number of bedrooms in a residential structure beyond the number in the original state approval; or, for all other uses, an increase in the wastewater flow greater than the OWTS approved design flow for any OWTS. However, the OWTS is unsuitable and an OWTS Application for New Building Construction or an OWTS Application for Alteration to a Structure, whichever is applicable, must be submitted when any of the following in (i)-(iii) apply, even if there is no increase in number of bedrooms or increase in flow:

(i) Whenever the proposed construction or renovation changes the structure's footprint such that the OWTS is not in compliance with these Rules;

(ii) If the proposed change of use is from a facility that does not prepare food to a restaurant or other facility that prepares food; or

(iii) For a change in use, if the OWTS for the new use meets the definition of a large OWTS pursuant to Rule 35.1.

(B) Prior to January 1, 2016, the OWTS is unsuitable if the OWTS is located within the Salt Pond or Narrow River Critical Resource Area, includes any existing components permitted and installed prior to February 6, 2002, and does not utilize nitrogen reducing technology in accordance with Rule 39.2 at the time of application and the applicant proposes construction or renovation meeting any of the conditions listed below in Rule 17.4.1(B)(i)-(ii). In-kind (i.e. same number of bedrooms) replacement of mobile homes in a licensed mobile and manufactured home park is exempt from this provision (B).

(i) Increasing the total enclosed area of the structure by more than six hundred (600) square feet. All construction on each floor conducted prior to November 1, 2004 shall be counted towards the six hundred (600) square foot total for the structure. Any change to the building footprint shall not encroach on the setback distances established in Rule 22 so as to require physical modification of the OWTS. Garages are exempt from this provision (i) provided they do net encroach on the setback distances established in Rule 22; or

(ii) Involving a substantial improvement to a structure located within a Federal Emergency Management Agency-designated Special Flood Hazard Area subject to inundation by the one percent (1%) annual chance flood (100-year flood). Substantial improvement to a structure is defined in RIGL **§ 23-27.3-106.1** to mean any construction, renovation, or improvements made within any twelve (12) month period and costing in excess of fifty percent (50%) of the physical value of the building prior to the start of construction. Determination of substantial improvement shall be made by the appropriate municipal or state building official.

(C) On or After January 1, 2016, the OWTS is unsuitable if the OWTS is located within the Salt Pond or Narrow River Critical Resource Areas and does not utilize nitrogen reducing technology in accordance with Rule 39.2 at the time of application and the applicant proposed construction or renovation meeting any of the conditions listed below in Rule 17.4.1(C)(i)-(iii). In-kind (i.e. same number of bedrooms) replacement of mobile homes in a licensed mobile and manufactured home park is exempt from this provision (C).

(i) Adding an additional floor level or portion of floor level to the structure;

(ii) Increasing the footprint of enclosed space of the structure. Garages are exempt from this Provision (ii) provided they do not encroach on the setback distances established in Rule 22; or

(iii) Involving a substantial improvement to a structure located within a Federal Emergency Management Agency-designated Special Flood Hazard Area subject to inundation by the one percent (1%) annual chance flood (100-year flood). Substantial improvement to a structure is defined in RIGL **§ 23-27.3-106.1** to mean any construction, renovation, or improvements made within any twelve (12) month period and costing in excess of fifty percent (50%) of the physical value of the building prior to the start of construction. Determination of substantial improvement shall be made by the appropriate municipal or state building official.

(D) The OWTS is unsuitable for any building construction, renovation or change of use, that results in an increase in the number of bedrooms in a residential structure beyond the number in the original state approval; or an increase in the wastewater flow greater than the OWTS approved design flow for any OWTS. An OWTS Application for New Building Construction or an OWTS Application for Alteration to a Structure shall be required in accordance with Rule 17.5 or Rule 17.6, respectively, whichever is applicable, before the proposed building construction, renovation or change of use may be allowed.

17.4.2 For OWTSs where any existing components have been installed without state approval, holding tanks, cesspools, and OWTSs installed prior to April 9, 1968: Whenever a person proposes any building construction, renovation, or change of use (as defined in Rule 7) of a structure served by such an OWTS, the OWTS is unsuitable and shall be upgraded to the standards herein. An OWTS Application for New Building Construction or an OWTS Application for Alteration to a Structure shall be required in accordance with Rule 17.5 or Rule 17.6, respectively, whichever is applicable. For the purposes of this Rule, the terms "building construction" and "building renovation" shall be defined as any addition, replacement, demolition and reconstruction, or modification of a structure on the subject property which:

(A) Results in any increase in wastewater flow into the OWTS, which for residential structures is equivalent to the addition of one (1) or more bedrooms;

(B) Involves demolition or replastering or replacement of interior wallboard, interior walls, ceilings, flooring, windows, plumbing fixtures, electrical wiring or kitchen cabinetry, which in total affects over fifty percent (50%) or more of the living area of the existing structure. In-kind (i.e. same number of bedrooms) replacement of mobile homes in a licensed mobile and manufactured home park is exempt from this provision (B);

(C) Involves adding an additional floor level or portion of floor level to the structure; or

(D) Increases the footprint of enclosed space of the structure. Garages are exempt from this provision (D) provided they do not encroach on the setback distances established in Rule 22. In-kind (i.e. same number of bedrooms) replacement of mobile homes in a licensed mobile and manufactured home park is exempt from this provision (D).

Window Requirements per RI State Building Code SBC-2-2013

1 – Windborne Debris – Zone 3 only (120 MPH Wind Zone) See R301.2.1.2

- Impact Resistance Glass – IZ3 Rating or Impact Zone 3 Rating
  Note: Windows will have a label noting compliance with ASTM E 1996 and of ASTM E 1886.
  Do not remove the label until sign-off by B.I.

Exception:

- Pre-cut Panels – minimum 7/16" thickness and maximum 8' span – pre-drilled with fasteners are permitted for opening protection in one and two story buildings only. Panels on site at CO Inspection. (Note: This exception is allowed by the Building Code but this may affect insurance rates. The owner should verify this with their insurance carrier.)

2 – U-Rating – Maximum Glazing U-Factor of .35

3 – Wind Pressure Requirements (+/_DP Rating) see R301.2.1

	Pos	Neg
Zone 2 (110 MPH)	30.52	-40.74
Zone 3 (120 MPH)	36.26	-48.58

The DP Rating of the windows must have a minimum positive & negative pressure rating as shown for the appropriate zone and exposure.

Note: For DP ratings other than those values shown submit the calculations for review prior to rough inspection.

Note: Windows must be installed per the manufacturer's instructions for the appropriate zone the structure is located.

Town of Charlestown Inspection Requirements

The following is a summary of the inspection requirements for the Town of Charlestown.

- All inspections must be coordinated with the Building Inspectors Office at least twenty four (24) hours in advance.
- Electrical Inspections are done on Monday and Thursday morning.
- Framing, Plumbing and Mechanical Inspections are done Tuesday, Wednesday and Friday mornings.
- The Building Permit DOES NOT cover any electrical, plumbing, or mechanical work. This requires separate permits, which must be obtained at the Building Inspectors Office.
- Failure on the part of the owner or contractor to notify the Building Inspectors Office for a required inspection will result in a STOP WORK ORDER that may cause delay in construction.
- The Building Inspector will affix a sticker approving the inspection or leave a field correction notice pointing out any deficiencies, which will require re-inspection prior to proceeding.

Inspections for New Structures, Additions & Renovations:

1. **Excavation** (When foundation hole is excavated & prior to any crushed stone or concrete being installed for footings or foundation)
2. **Foundation Rebar** (Prior to pouring concrete)
3. **Rebar Grounding Electrode Conductor and Connection** per NEC 250-52A3 (**Required** when 20' or more of conductive steel is encased by concrete)
4. **Foundation Coating & Foundation Insulation** (prior to backfilling)
5. **Footing Inspection for Decks/Porches** (after forms or sonotube are installed and prior to pouring concrete)
6. **Modular Dwelling Attachment** (to foundation and each level/section)
7. **Fireplace Throat**
8. **Electric Trenches, Gas Line Trenches, and Underground LPG Tanks and Lines** (Prior to backfilling)
9. **Gas Line Pressure Test** (If line is connected to more than 1 appliance)
10. **Under Slab Plumbing** (Prior to covering)
11. **Shear Walls, roof blocking, special nailing schedules, and hurricane ties** (Prior to covering -generally, this inspection will be done at the Rough Framing Inspection)
12. **Roughs - Framing, Electrical, Plumbing, & Mechanical** (Prior to insulation and interior covering)
13. **Insulation & Energy Code Inspection for Air Leakage** (Prior to covering with wallboard)
14. **Final Inspection for Certificate of Use and Occupancy** (Prior to use and occupancy of the structure or addition)

NOTE: A CERTIFICATE ILLUSTRATING COMPLIANCE WITH THE BLOWER DOOR TEST MUST BE SUBMITTED TO VERIFY COMPLIANCE WITH THE 2013 ENERGY CODE.

Requirements for Certificate of Occupancy:

- Final Inspection by this office
- Fire Chief/Marshal final inspection (Charlestown Fire District 364-9117, Dunn's Corner 322-0577)
- Certificate of Conformance from DEM (C.O.C)
- Elevation Certificate (If in a Flood Zone)
- Well Water Test (new wells only)
- Posting of Energy Certificate

If there are any questions pertaining to the inspection procedures, please contact the Building Inspector's Office at (401)-364-1215.