



# City and Borough of Sitka

100 Lincoln Street Sitka, Alaska 99835

*Coast Guard City, USA*

## MEMORANDUM

**To:** Mayor McConnell and Members of the Assembly

**From:** Stan Eliason, Harbormaster on behalf of Port and Harbor Commission

**Subject:** Float Houses and Float Homes

**Date:** June 5<sup>th</sup> 2014

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The Port and Harbor Commission voted and approved the draft ordinances regarding float houses and float homes at their meeting on May 14<sup>th</sup> 2014. A great deal of time and effort was put into these ordinances to comply with all federal, state and local requirements to allow float houses and float homes within the CBS harbor system. The Port and Harbor Commission approved these unanimously.

**RECOMMENDED ACTION:** Approve the ordinances.

CITY AND BOROUGH OF SITKA

ORDINANCE NO. 2014-23 A

AN ORDINANCE OF THE CITY AND BOROUGH OF SITKA MODIFYING SITKA  
GENERAL CODE TITLE 19 ENTITLED "BUILDING AND CONSTRUCTION" BY  
ADDING LANGUAGE TO EXEMPT FLOAT HOMES WITHIN THE  
JURISDICTIONAL LIMITS OF THE HARBOR SYSTEM UNDER SGC 19.08.025  
ENTITLED "DOCKS AND BUILDINGS" AND ADDING CHAPTER 19.15 ENTITLED  
"BUILDING CODE FOR FLOAT HOMES," CHAPTER 19.16 ENTITLED  
"ELECTRICAL CODE FOR FLOAT HOMES," AND CHAPTER 19.17 ENTITLED  
"PLUMBING CODE FOR FLOAT HOMES"

1. **CLASSIFICATION.** This ordinance is of a permanent nature and is intended to become a part of the Sitka General Code ("SGC").

2. **SEVERABILITY.** If any provision of this ordinance or any application to any person or circumstance is held invalid, the remainder of this ordinance and application to any person or circumstance shall not be affected.

3. **PURPOSE.** The City and Borough of Sitka ("CBS") do not have provisions in the SGC relating to float homes within the jurisdictional limits of the harbor system as set forth in SGC 13.02.040. The purpose of this ordinance is to update SGC Title 19 which would allow for the building and construction of float homes as well as add provisions within that title to regulate and provide guidance to float home owners to ensure compliance with all federal, state and local requirements for the construction and building of float homes and include adoption by reference of the 2009 International Residential Code. The proposed modifications and additions to SGC Title 19 are as follows:

Modifying –

- SGC 19.08.025 entitled "Docks and floating buildings" to make an exception to float homes as regulated by SGC 13.15 and SGC 19.15 of required permitting and plan review for non-structural fire and life safety project components.

Adding -

- SGC Chapter 19.15 entitled "Building Code for Float Homes;"
- SGC Chapter 19.16 entitled "Electrical Code for Float Homes;" and
- SGC Chapter 19.17 entitled "Plumbing Code for Float Homes."

4. **ENACTMENT.** NOW, THEREFORE, BE IT ENACTED by the Assembly of the City and Borough of Sitka that SGC 19.08.025 entitled "Docks and floating buildings" is amended to exempt float homes as allowed regulated in SGC 13.15 and SGC 19.15 and add SGC 19.15 entitled "Building Code for Float Homes," SGC 19.16 entitled "Electric Code for Float Homes," and SGC 19.17 entitled "Plumbing Code for Float Homes" to regulate float homes and its construction within the jurisdiction of the City and Borough of Sitka (new language

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**Title 19**  
**BUILDING AND CONSTRUCTION**

**Chapters:**

- 19.01 Building Code**
- 19.02 Electrical Code**
- 19.03 Plumbing Code**
- 19.04 Mechanical Code**
- 19.05 Fire Code**
- 19.06 Uniform Code for Abatement of Dangerous Buildings**
- 19.07 Demolition or Removal of Municipally Owned Buildings**
- 19.08 Code Applicability**
- 19.09 Electrical Code for Islands**
- 19.10 Plumbing Code for Islands**
- 19.11 Mechanical Code for Islands**
- 19.12 Fire Code for Islands**
- 19.14 Building Code for Islands**
- 19.15 Building Code for Float Homes**
- 19.16 Electrical Code for Float Homes**
- 19.17 Plumbing Code for Float Homes**
- 19.20 Fire Marshal Deferral Standards**

\* \* \*

**Chapter 19.08**  
**CODE APPLICABILITY**

**Sections:**

- 19.08.010 Geographical limits.**
- 19.08.020 Sitka road system.**
- 19.08.025 Docks and floating buildings.**
- 19.08.030 Islands.**
- 19.08.040 Definition of “islands” for purposes of this title and Title 22.**

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**19.08.025 Docks and floating buildings.**

Docks and floating buildings, with the exception of float homes as allowed in the Sitka Harbor System and regulated by SGC 13.15 and SGC 19.15, require permitting and plan review for non-structural fire and life safety project components only. Section 19.01.070 does not apply to docks and floating buildings.

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**Chapter 19.15**  
**BUILDING CODE FOR FLOAT HOMES**

**Sections:**

- 19.15.010 Adoption by reference certain portions of the International Residential Code for one and two family dwellings.**
- 19.15.020 Size of floatation system.**
- 19.15.030 Floatation and stability.**

- 95           **19.15.040 Reserve buoyancy criteria.**
- 96           **19.15.050 Exiting and emergency egress.**
- 97           **19.15.060 Mooring.**
- 98           **19.15.070 Fire separation.**

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100           **19.15.010 Adoption by reference certain portions of the International Residential Code**  
101 **for One and Two Family Dwellings.**

102           The 2009 International Residential Code for One and Two Family Dwellings, published by  
103 the International Code Council, as amended in Title 19.01, is adopted and included by  
104 reference, with the following exceptions:

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- 106           A. Amend Chapter 2 and add new definition: **Float home** – A single family dwelling unit  
107 attached to a flotation device, built to the minimum standards of the IRC and of this  
108 ordinance. Float homes are not boats and are subject to all the laws and regulations governing  
109 private dwelling units.
- 110
- 111           B. Chapter 4 of the IRC is deleted.
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- 113           C. All references to garages are deleted.
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- 115           D. Stairs providing a required means of egress from an area of not more than 200 square feet  
116 shall have a minimum clear width of 30 inches. Maximum riser height shall be not more than  
117 8 inches and minimum tread depth shall be not less than 9.25 inches.
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- 119           E. Guards are not required where open decks, balconies, and walkways do not exceed 36  
120 inches in height above the water line.
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- 122           F. Fastenings in areas exposed to the elements shall be hot dipped galvanized steel, marine  
123 grade bronze, copper, stainless steel, or other corrosion resistant material suitable for marine  
124 use.
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- 126           G. Boat wells under floating structures shall be separated from the dwelling unit, and from  
127 structural members supporting the dwelling unit, by a minimum of one layer of 5/8 inch Type  
128 X, water resistant, gypsum wall board, or equivalent approved fire rated assembly. Boat  
129 wells shall provide adequate natural ventilation to prevent the buildup of flammable vapors.
- 130
- 131           H. All framing lumber in contact with the flotation device and all framing lumber within 12  
132 inches of the water surface shall be factory preservative treated in accordance with AWP  
133 U1. Plywood shall be exterior grade and all plywood below the deck level shall be marine  
134 grade. Any other decay resistant materials shall be approved by the Building Official.
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- 136           I. Roof coverings shall be fire-resistant or noncombustible.
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- 138           J. The building official shall have the authority to rule on the applicability of this code as it  
139 applies to residential floating structures.
- 140

141 **19.15.020 Size of flotation system.**

142 The dimensions of the flotation system shall be not larger than 20 feet by 40 feet.

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144 **19.15.030 Flotation and Stability**

145 A. The flotation system shall be designed according to accepted marine engineering and  
146 naval architectural principles. The flotation devices shall be structurally sound and securely  
147 integrated with the framing for the attached structure. The design shall be approved and  
148 sealed by an appropriately licensed professional engineer qualified in such design and shall  
149 be submitted to the building official for approval.

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151 B. The flotation device shall be water tight, durable and protected from deterioration by  
152 water, impact damage due to floating debris, electrolytic action, corrosion, water-borne  
153 solvents, organic infestation, chafing or physical abuse. Logs and unprotected plastic foam  
154 insulation are not approved flotation devices.

155

156 C. Where solid flotation devices are not used, hulls shall be fitted with longitudinal and/or  
157 transverse watertight bulkheads sufficient to keep the loaded hull afloat with positive stability  
158 with any one compartment flooded. No compartment shall compromise more than 20 per  
159 cent of the total available flotation volume.

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161 D. Where solid floatation devices are not used the flotation devices shall be constructed so  
162 that access to each compartment is readily available from the first floor level of the  
163 completed floating structure.

164

165 E. A float home with a flotation device other than solid flotation shall be equipped with  
166 bilge pumps and a bilge alarm system with detectors in each compartment with audible and  
167 visual alarm indicators in the float home. At least one visual indicator shall be located outside  
168 the float home in a place visible to passersby.

169

170 F. The overall buoyancy and stability of the flotation device and attached structure shall be  
171 designed to accommodate moving and launching, wave action, loads imposed by mooring,  
172 vessels and walkways moored to the structure, live and dead loads, and the design snow  
173 loads and wind loads in effect in the City and Borough of Sitka.

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175 G. The flotation device shall have sufficient stability in both the longitudinal and transverse  
176 directions to limit the amount of heel from the horizontal resulting from off of center live  
177 loading to a maximum of 4 degrees.

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179 H. The flotation system and decking shall provide access to, and protection for, the sewage  
180 holding tank.

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182 **19.15.040 Reserve Buoyancy Criteria**

183 The flotation system shall have sufficient buoyancy to support the design weight of the float  
184 home plus the maximum combined weight of deadweight items and design snow load and  
185 maintain a minimum freeboard of 14 inches. When design wind load is applied to the  
186 superstructure the amount of heel shall be not more than 4 degrees from horizontal or one

187 half the freeboard, whichever is less. Freeboard is measured from the surface of the water to  
188 the bottom of the lowest floor or deck framing members.

189

190 **19.15.050 Exiting and Emergency Egress**

191 In addition to the requirements of the IRC, including, but not limited to Chapter 3, section  
192 R311, floating homes shall have a 24 inch minimum width open deck on all sides. Decks  
193 shall be constructed so as to prevent the ponding of water.

194

195 **19.15.060 Mooring**

196 Cleats, bollards, bull rails or other such devices shall be sufficient in number and attached to  
197 the floating structure in such a way as to provide adequate mooring points to secure the float  
198 home in the highest design wind load. Mooring lines shall be kept in good condition, kept  
199 free of chafing, and shall be removable without the use of tools.

200

201 **19.15.070 Fire separation**

202 A. A clear space of at least eight feet shall be provided between adjacent structures  
203 measured from building wall line horizontal to adjacent building wall line. Roof eave  
204 projections shall be no closer than six feet. Table 302.1 of the IRC shall not apply.

205 B. Where floating homes are placed closer than eight feet from building wall line horizontal  
206 to building wall line; walls, eaves and roofs shall be constructed in accordance with Table  
207 302.1 of the IRC.

208 C. A clear space of four feet shall be provided between adjacent floats.

209

210 **Chapter 19.16**

211 **ELECTRICAL CODE FOR FLOAT HOMES**

212 Sections:

213 **19.16.070 Adoption by reference.**

214

215 **19.16.070 Adoption by reference.**

216 The 2011 Edition of the National Electrical Code, copyrighted by the National Fire  
217 Protection Association, is adopted and incorporated by reference.

218

219 **Chapter 19.17**

220 **PLUMBING CODE FOR FLOAT HOMES**

221 Sections:

222 **19.17.010 Adoption by reference.**

223 **19.17.020 Sewage holding tank.**

224 **19.17.030 Sewage treatment.**

225 **19.17.040 Portable water.**

226

227 **19.17.010 Adoption by reference.**

228 The 2009 Edition of the Uniform Plumbing Code, promulgated by the International  
229 Association of Plumbing and Mechanical Officials, is adopted and incorporated by reference,  
230 including the following appendices:

231

232 Appendix A, Recommended Rules for Sizing the Water Supply System.

229 The 2009 Edition of the Uniform Plumbing Code, promulgated by the International  
230 Association of Plumbing and Mechanical Officials, is adopted and incorporated by reference,  
231 including the following appendices:

232

233 Appendix A, Recommended Rules for Sizing the Water Supply System.

234 Appendix B, Explanatory Notes on Combination Waste and Vent Systems.

235 Appendix I, Installation Standards.

236 Appendix K, Private Sewage Disposal Systems.

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238 **19.17.020 Sewage holding tank**

239 A. Sewage holding tanks for float homes shall be sized in accordance with Table K-2,  
240 Appendix K of the Uniform Plumbing Code.

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242 B. Sewage holding tanks shall be constructed of materials not subject to corrosion or decay  
243 and shall be watertight.

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245 **19.17.030 Sewage Treatment**

246 Sewage, including greywater, shall be disposed of by pumping to a portable holding tank and  
247 delivering to an approved sewage pump out facility. Alternatively, sewage may be treated  
248 with an approved sewage treatment system and discharged into the water. The owner is  
249 responsible for securing appropriate state and federal permits for such systems. Untreated  
250 sewage or greywater shall not be discharged into the water.

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252 **19.17.040 Potable Water**

253 Connections to the municipal water system shall be of an approved method, shall include  
254 backflow prevention and shall be approved by the building official.

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256 5. **EFFECTIVE DATE.** This ordinance shall become effective 30 days after the date  
257 of its passage.

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259 **PASSED, APPROVED, AND ADOPTED** by the Assembly of the City and Borough of  
260 Sitka, Alaska this 8th day of July, 2014.

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Matt Hunter, Deputy Mayor

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265 **ATTEST:**

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Colleen Ingman, MMC

268 Municipal Clerk