

PURPOSE

The Houston Construction Code requires Emergency Responder Communication Coverage (ERCC) in all buildings. The Houston Fire Department (HFD) and Building Code Enforcement (BCE) initiated a practice of compliance verification, effective June 6, 2018. In all new buildings, existing building remodel and buildout plans, the code analysis sheet is now required to include information from the designer acknowledging that the facility will comply with all applicable code provisions for ERCC, as required by Sections 918 and 510 of the current adopted Houston Building and Fire Codes, respectively.

EXEMPTION:

Facilities that meet the following are exempt:

- Buildings without basements, and
- Three stories or less in height, and
- Having an aggregate total building area not exceeding 50,000 square feet.

NOTE: With prior approval from the building official and the fire code official, a wired communication system in accordance with Section 907.2.13.2 may be permitted to be installed or maintained for new construction in lieu of an approved radio coverage system.

EXISTING FACILITIES

Existing facilities utilizing previously authorized wired ERCC communication systems shall be maintained as required by the code of record associated with the original construction and Chapter 11 of the currently adopted Houston Fire Code in lieu of installing an approved radio coverage system. Submitted plans for all remodels and lease buildouts of existing facilities shall include documentation in the code analysis sheet identifying compliance with ERCC.

NEW CONSTRUCTION

- **TESTS:** Prior to installing any Bi-Directional Amplifier (BDA) system, a test shall be conducted to determine whether the building has the radio coverage required by code, or a radio signal enhancing system is needed. The test, and Form CE_1386 (fully completed) shall be submitted for review.

Form CE_1386 can be downloaded using the following link:

<https://www.houstonpermittingcenter.org/media/6881/download>.

- **PLAN REVIEW SUBMITTAL PROCESS:** When a Radio Signal Enhancing System is needed, ERCC plans must be submitted for review. All ERCC plan submittals shall be designed, sealed, signed and dated by a Texas Professional Engineer. ERCC plan submittals may address the required code provisions using one of the following submittal methods:
 - a. Include ERCC plans in the submitted construction documents for new buildings, additions, buildouts, and remodels of existing buildings or lease spaces, or

- b. Provide a note on the code analysis sheet indicating compliance with the code provisions of Section 510 of the adopted Houston Fire Code and include a completed deferred submittal Form No. CE-1086 Plan Review Request for Deferred Submittal in the submitted construction plans requesting deferred submittal of appropriately designed ERCC plans.

Form CE_1086 can be downloaded using the following link:

<https://www.houstonpermittingcenter.org/media/1821/download>

- **POST INSTALLATION TESTING AND INSPECTION:** Prior to issuing the Certificate of Occupancy (CO) or approving the final inspection, facilities shall be tested by a City of Houston registered ERCC third-party special inspector using appropriately trained personnel. The third-party inspector shall also inspect the installation of the system for compliance with all relevant codes and standards. The third-party inspector shall then fully complete Form CE_1385 and submit it with the test for our review.

Form CE_1385 can be downloaded using the following link:

<https://www.houstonpermittingcenter.org/media/6876/download>

- **SUBMITTAL OF REPORTS AND INSPECTION FORMS:** Tests, Post-Installation tests, and special inspection reports documenting ERCC compliance with the Houston Fire Code, shall be submitted to following email address for review: code.development@houstontx.gov

NOTE: Every special inspection report shall be conducted by the City of Houston approved and registered ERCC Special Inspector. The ERCC special inspection report shall clearly document compliance with all applicable code provisions specifically identified in Section 510 of the current adopted Houston Fire Code.

MINIMUM QUALIFICATIONS OF ERCC DESIGNER, INSTALLER AND SPECIAL INSPECTOR TESTING PERSONNEL

The code provisions of the Houston IFC require the ERCC system designer to be:

- A Texas Professional Engineer with appropriate training (Plans shall be sealed, signed and dated.)

The ERCC system may be installed, and special inspection testing completed by:

- A Texas Professional Engineer with appropriate training, or
- A valid FCC Licensed General Radio Telephone Operator registered with the City of Houston as an ERCC Special Inspector; with in-building emergency radio system certification issued by a nationally recognized organization, school or the emergency radio system manufacturer of the equipment being installed.

DEFERRED SUBMITTAL ERCC PLAN REVIEW

Texas engineer sealed deferred submittal plans for ERCC shall be submitted for review. A plan analyst will review the submitted documents for compliance with the ERCC provisions of Section 510 of the Houston Fire Code. Additionally, Texas engineers sealed structural plans and anchorage details addressing the proper Houston wind speed and dead loads for all transmitter and/or receiver towers or other equipment installed on the exterior of the building, shall be included.

Where the scope of a new project proposes the installation or replacement of ERCC equipment required to meet the code provisions of the Houston Building and Fire Codes, the project shall be a building permit (13) with a permit fee based on the cost of construction, the same as any other remodel project. Where a deferred submittal request is authorized by a supervisor or manager, the cost of the ERCC system design, materials, and installation shall be included on the original or master project and the plan review may be completed as a minimum fee (S9) plan review attached to the original or master project, the same as any other deferred submittal request.

CITY OF HOUSTON HITS – RADIO COMMUNICATION SERVICES & HARRIS COUNTY RADIO NETWORK OPERATION CENTER (RNOC) CONTACT AND GENERAL ERCC FREQUENCIES

Contact City of Houston HITS – Radio Communications Services and Harris County Radio Network Operation Center (RNOC) for specific frequencies at specific project locations.

City of Houston HITS – Radio Communications Services

2318 Greens Road, Houston, Texas 77032

Attn: NOC

Office: 832-393-0399

Email: RCSNETWORKOPS@houstontx.gov

Email: Mark.Howell@houstontx.gov

Harris County RNOC

Office: 713-274-8815

Email: RNOC@ITC.HCTX.NET

Email: James.Bridwell@harriscountytexas.gov

NOTE: Loaner radios are available for testing.

ERCC SPECIAL INSPECTION REGISTRATION

Individuals interested in registering as an ERCC Special Inspector or ERCC Designer may contact by email at: code.development@houstontx.gov