

PURPOSE

The *Houston Construction Code* requires *Emergency Responder Radio Coverage (ERRC)* 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 *ERRC*, as required by Sections 914 and 510 of the current adopted *Houston Building and Fire Codes*, respectively.

EXISTING FACILITIES

Existing facilities utilizing previously authorized wired *ERRC* 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 *ERRC*.

NEW CONSTRUCTION

A pretest shall be conducted to determine whether the building has the radio coverage required by code, or a radio signal enhancing system is needed. When a DBA system is needed, *ERRC* plans must be submitted for our review as per PART 3 below. Prior to issuing the Certificate of Occupancy (CO) or approving the final inspection, facilities not otherwise exempted by PART 2 below, shall be tested by a City of Houston registered *ERRC* third-party special inspector using appropriately trained personnel. A copy of the special inspection report documenting *ERRC* compliance with the *Houston Fire Code*, shall be submitted to *BCE* at the following email address for review: HPC-RA@houston.tx.gov. 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.

NOTE: Every special inspection report shall be from a City of Houston registered *ERRC* Special Inspector complying with the provisions of PART 1. The *ERRC* special inspection report shall clearly document compliance with all applicable code provisions specifically identified in Section 510 of the current adopted *Houston Fire Code*.

PART 1 – MINIMUM QUALIFICATIONS OF ERRC DESIGNER, INSTALLER AND SPECIAL INSPECTOR TESTING PERSONNEL

The code provisions of Section 510.4.2.9 Houston IFC (2015) require the *ERRC* system designer to be:

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

The *ERRC* 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 *ERRC 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.

A copy of the *BCE ERRC* Special Inspection Report Checklist, and/or *ERRC* Initial Grid Test (Pretest), form(s) must be submitted by the special inspection agency along with their special inspection and testing documentation. These forms may be downloaded at the *BCE* website using the following links: <https://www.houstonpermittingcenter.org/media/6876/download> and <https://www.houstonpermittingcenter.org/media/6881/download>.

PART 2 – ERRC PLAN REVIEW AND SPECIAL INSPECTION EXEMPTIONS

NOTE: Although all structures require compliance with the *Houston Construction Code* provisions for *ERRC*. Facilities that meet the following are exempt from the required plan review and third-party special inspection verification process:

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

PART 3 – PLAN REVIEW SUBMITTAL PROCESS

Where a facility is not otherwise exempted by PART 2 above; *ERRC* plan submittals and third-party special inspection code compliance verification is required. All *ERRC* plan submittals shall be sealed, signed and dated by a Texas Professional Engineer. *ERRC* plan submittals may address the required code provisions using one of the following submittal methods:

- a. Include *ERRC* plans designed, sealed, signed, and dated by a Texas Professional Engineer in the submitted construction documents for new buildings, additions, buildouts, and remodels of existing buildings or lease spaces, or

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- 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 *ERRC* plans.

The *BCE* deferred submittal *Form No. CE-1086 Plan Review Request for Deferred Submittal* has been updated to include a line item for deferred submittals of *ERRC* plans. *Form No. CE-1086* may be downloaded using the following web address: <https://www.houstonpermittingcenter.org/media/1821/download>

PART 4 – DEFERRED SUBMITTAL ERRC PLAN REVIEW

The Texas engineer sealed deferred submittal plans for *ERRC* may be reviewed and approved through the commercial one-stop section where authorized by a plan review supervisor or manager. The one-stop plan analyst will review the submitted documents for compliance with the *ERRC* provisions of Section 510 of the *Houston Fire Code*. Additionally, Texas engineer 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 *ERRC* 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 *ERRC* 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 (\$9) plan review attached to the original or master project, the same as any other deferred submittal request.

At the request of customers, *BCE* provides an *ERRC* special inspection report template which includes a checklist of minimum required specific information expected to be addressed by all third-party *ERRC* special inspection reports.

At the completion of the *ERRC* signal booster system installation and prior to issuance of the certificate of occupancy or a final inspection, the *ERRC* signal booster systems shall be tested for *ERRC* compliance verification by a third-party special inspector registered with the City of Houston. *ERRC* special inspection reports shall be submitted directly to the *Customer Assistance & Code Development Office* by email at: HPC-RA@houstontx.gov.

PART 5 – CITY OF HOUSTON HITS – RADIO COMMUNICATION SERVICES & HARRIS COUNTY RADIO NETWORK OPERATION CENTER (RNOC) CONTACT AND GENERAL ERRC FREQUENCIES

NOTE: 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

Harris County RNOC

Office: 713-274-8815
Email: RNOC@ITC.HCTX.NET

General Government Services		
TX FREQUENCY	RX FREQUENCY	CHANNEL NAME
859.9375	814.9375	1-CC
859.4375	814.4375	2-CC
859.2625	814.2625	3-CC
858.9375	813.9375	4-CC
North East Public Safety Simulcast		
TX FREQUENCY	RX FREQUENCY	CHANNEL NAME
773.43125	803.43125	1-CC
773.13125	803.13125	2-CC
772.78125	802.78125	3-CC
771.55625	801.55625	4-CC
North West Public Safety Simulcast		
TX FREQUENCY	RX FREQUENCY	CHANNEL NAME
773.96875	803.96875	1-CC
773.65625	803.65625	2-CC
773.24375	803.24375	3-CC
772.80625	802.80625	4-CC

South East Public Safety Simulcast		
TX FREQUENCY	RX FREQUENCY	CHANNEL NAME
773.38125	803.38125	1-CC
772.93125	802.93125	2-CC
771.40625	801.40625	3-CC
771.63125	801.63125	4-CC
South West Public Safety Simulcast		
TX FREQUENCY	RX FREQUENCY	CHANNEL NAME
773.74375	803.74375	1-CC
772.59375	802.59375	2-CC
772.21875	802.21875	3-CC
771.84375	801.84375	4-CC
Downtown Tunnel Site		
TX FREQUENCY	RX FREQUENCY	CHANNEL NAME
770.30625	800.30625	1-CC
770.00625	800.00625	2-CC
769.75625	799.75625	3-CC
769.54375	799.54375	4-CC

PART 6 – ERRC SPECIAL INSPECTION REGISTRATION

Individuals interested in registering as an *ERRC Special Inspector* or *ERRC Designer* may contact Maher Khansa by phone at: 832-394-9043 or by email at: Maher.Khansa@houstontx.gov.