

July 25, 2019

Melanie E. La Rocca,  
Commissioner

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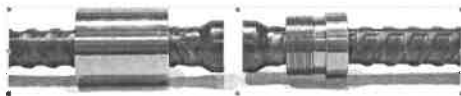
Mr. Robbie Hall  
Headed Reinforcement Corp  
11200 Condor Ave.  
Fountain Valley, CA 92708

Re: OTCR Submittal Code #24-19  
General acceptance application for Mechanical Splicing Systems (HRC  
500/510 Xtender)

Dear Mr. Hall,

Thank you for submitting the OTCR1 application dated March 26, 2019 for material assessment and approval of Mechanical Splicing Systems, which includes the HRC 500/510 Xtender system. The application includes the following:

- **System Description.** The HRC 500/510 Xtender Mechanical Coupler System is used for tension and compression mechanical splices of uncoated, deformed steel reinforcing bars. The system is used in the design and construction of structural concrete members.
- **Equipment Description.** The HRC 500/510 Xtender Mechanical Coupler system consists of an HRC 500 threaded male coupler component, an HRC 510 threaded female coupler component and two steel reinforcing bars that are prepared with headed upset ends (See figure below). The coupler is used to mechanically butt-splice No.4 through No. 11 and No. 14 steel reinforcing bars.



- **Supporting Documents.**
  1. OTCR 1 application
  2. Literature titled "HRC 500 Series Coupler"
  3. Literature titled "HRC 500 SERIES INSTALLATION PROCEDURE"
  4. ICC-ES ESR 2764 report dated March 6, 2019.
  5. Test report issued by Smith Emery Laboratories Project No. 42598-2 dated April 16, 2019 and Project No. 30836-3 dated September 29, 2019

In accordance with AC 28-113.1, materials are required to be used, tested and approved in accordance with specific provisions of the code, including the following

- Requirement: New York City Construction Codes Section BC 1901.2 requires steel reinforcement to be designed and installed in accordance with the requirements of this chapter and ACI 318-11. ACI 318-11 requires mechanical couplers comply with requirements of sections 12.14.3.2.
  - Compliance statement: The splices comply with Section 12.14.3.2 of ACI 318-11 in accordance with evaluation report performed by the test report issued by independent testing laboratory, Smith Emery Laboratories Project No. 42598-2 dated April 16, 2019.
  
- Requirement: In addition the mechanical splices, including HRC 500/510 Xtender system are for use as either Type 1 or Type 2 mechanical splices of deformed steel reinforcing bars for seismic design in accordance with Section 21.1.6.1 of ACI 318-11.
  - Compliance statement: The HRC 500/510 Xtender mechanical splices complies with Section 21.1.6.1 of ACI 318-11 for Type 1 or Type 2 for seismic design in accordance with evaluation report performed by test report submitted by independent testing laboratory Smith Emery Laboratories Project No. 30836-3 dated September 29, 2019.

Pursuant to AC 28-113.1 OTCR evaluation of your application has determined that the use of the HRC 500/510 Xtender mechanical coupler system complies with and is prescribed in accordance with BC 1901.2. The installation shall comply with the additional design, installation and inspection identified below.

**1. Design and Filing Requirements**

- a. **Design.** HRC 500/510 Xtender system must be designed in accordance New York City Construction Codes.

**2. Requirements Prior to Signoff**

- a. **Installation.** Installation of the HRC 500/510 Xtender system shall be in accordance with:

- i. Approved plans.
- ii. Manufacturer's instructions "HRC 500 Series Coupler" (in accordance with BC 28-103.8 as a matter essential for structural safety).
- iii. ICC-ES ESR 2764 report dated March 6, 2019 (in accordance with BC 28-103.8 as a matter essential for structural safety).

b. **Inspections:**

- i. **Special Inspections.** Installation of HRC 500/510 Xtender Mechanical Coupler system must be inspected as required by BC 1704.4 of the Building Code and Department Rules covering special inspection.

In the event of non-compliance with any of the requirements listed above or unresolved failure, the HRC 500/510 Xtender Mechanical Coupler System will be required to be removed at the owner's expense. An audit may be performed to verify compliance



This OTCR Conditional Acceptance Letter only addresses material/equipment acceptance. Project approval and permit must be obtained from the Department of Buildings through the required application process.

Please do not hesitate to contact us with any question.

Regards,

*Siun Derkhidam*  
Siun Derkhidam  
OTCR Project Manager

Cc: Alan Price, PE, OTCR Director