

Melanie E. La Rocca, Commissioner

Siun Derkhidam OTCR Examiner sderkhidam@buildings.nyc.gov

OTCR Division 280 Broadway, 7th fl. New York, NY 10007 nyc.gov/buildings

+1 212 393 2048 tel +1 212 566 3813 fax July 25, 2019

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

Re: OTCR Submittal Code #25-19

Headed Reinforcing Bars - HRC 555 (Hot Forged) and HRC 670 (Field

Installed)

Dear Mr. Hall,

Thank you for submitting the OTCR1 application dated March 26, 2019 for material assessment of Headed Reinforcing Bars – Headed Reinforcing Bars HRC 555 and HRC 670. The application includes the following:

 System Description. The system description for the HRC 555 series headed reinforcing bars and the HRC 670 Headlock series headed reinforcing bars are listed below:

The HRC 555 series headed reinforcing bars are Class HA headed deformed bars complying with the requirements of ASTM A970. HRC 555 is integrally factory forged where the heads are produced by deforming the bar end(s) in a hot forging process.

The HRC 670 Headlock series field installed T- heads bars are Class HA heads complying with the requirements of ASTM A970. The HRC 670 Headlock series are field installed T-heads used mainly for retrofits and field repairs.

 Equipment Description. The equipment description for the HRC 555 series headed reinforcing bars and the HRC 670 headed reinforcing bars are listed below:

The HRC 555 series headed reinforcing bars are Class HA headed deformed steel reinforcing bars for concrete reinforcement. HRC

The HRC 670 Headlock series field installed T- heads is an attachable head for deformed steel reinforcing bars used for concrete reinforcement.





Supporting Documents.

- 1. OTCR 1 application
- 2. Literature titled "HRC 555 Series T-Head"
- 3. Literature titled "HRC 670 Series T- Head"
- 4. Literature titled "Installation Procedure"
- 5. UES Report Number 177 dated November 30, 2019.
- 6. Test report issued by Smith Emery Laboratories Project No. 42598-1 dated November 9, 2017 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.

The ACI 318-11 requires headed reinforcing bars to comply with Sections 3.5.9 and 12.6.1.

Section 3.5.9 – For material (physical description and material properties) description of acceptable headed bars, the headed bars must conform to ASTM A970, Annex A1 which covers Class HA Head dimensions.

Compliance statement: IAMPO UES Evaluation Report Number 177 dated October 30, 2018 indicates that the HRC 555 and HRC 670 headed bars conform to Class HA Head Dimensions. See Section 3.1.1 and 3.1.2.

Section 12.6.1 – For development length of acceptable headed bars, Section 12.6.1 outlines specific requirements.

Compliance statement: IAMPO UES Evaluation Report Number 177 dated October 30, 2018 indicates compliance with Section 12.6.1. See Section 2.

Pursuant to AC 28-113.1 OTCR evaluation of your application has determined that the use of the Headed Reinforcing Bars HRC 555 and HRC 670 complies with BC 1901.2. The installation shall comply with the additional design, installation and inspection identified below:

1. Design and Filing Requirements

a. Design. Headed Reinforcing Bars HRC 555 and HRC 670 must be designed in accordance New York City Construction Codes

2. Requirements Prior to Signoff



- a. **Installation.** Installation of the Headed Reinforcing Bars HRC 555 and HRC 670 shall be in accordance with:
 - i. Approved plans
 - ii. IAMPO UES Evaluation Report Number 177 dated November 30, 2019(in accordance with 28-103.8 as a matter essential for structural safety).
 - iii. Literature titled "HRC 555 Series T- Head" (in accordance with 28-103.8 as a matter essential for structural safety).
- b. Inspections:
 - Special Inspections. Installation of Headed Reinforcing Bars HRC 555 and HRC 670 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 Headed Reinforcing Bars HRC 555 (Hot Forged) and HRC 670 (Field Installed)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.

Regards.

Siun Derkhidam

OTCR Project Manager

Cc: Alan Price, PE, OTCR Director