



भारत सरकार Government of India  
राष्ट्रीय परीक्षण शाला (द.क्षे.)  
National Test House (SR), Chennai  
तारामणी, चेन्नई, तमिलनाडु - 600113  
Tharamani, Chennai - 600113, Tamilnadu



TC-13137



ULR : TC1313725600001440F, TC1313725700001382F

NABL A. PARTICULARS OF SAMPLE SUBMITTED

COMPLETE TEST CERTIFICATE

भाग 'अ' जमा किये गये नमूने का विवरण

परीक्षण प्रमाणपत्र सं/Test Certificate No:  
NABL/NTH(SR)/M(L)/25/7157\_1

एस.आर.एफ. संख्या/SRF Number:  
NTH(SR)/M(L)/25/7157

जारी होने की तिथि/Date of issue  
21 Jun, 2025

कोड सं/QR Code  
: NTH250089679

a) जिसे जारी करना है/Issued To	:	JEPPIAAR FURNACE AND STEELS PRIVATE LIMITED
b) पता/Address	:	158,Kunnavakkam Village, Panruti Post., Kanchipuram, Kanchipuram, Tamil Nadu, India - 631604
c) ग्राहक का संदर्भ सं एवं दिनांक/Customer's Ref. No.	:	Letter No.Nil Dated 29.04.2025
d) नमूना मुहरबंद स्थिति/Sample Sealed Status	:	Not Sealed
e) परीक्षण सामग्री का विवरण/Description of Test item	:	JPR TMT Fe 550D Grade
f) नामपद्धति का विवरण/Description of Nomenclature	:	JPR TMT Bar of Nominal size 8mm
g) नमूने की विशिष्टता (यदि हो)/Product Specification(if any)	:	IS 1786 (2008)
h) नमूना प्राप्ति की तिथि /Date of Receipt of the Test item	:	08 May, 2025
i) कार्य निष्पादन की तिथि/Date(s)of Performance of Tests	:	From: 13 May, 2025 To: 21 Jun, 2025
j) परिमाण/Quantity	:	6.0 nos
k) कोई अन्य सूचना / अंतिम तिथि, यदि हो/Any other Information / Expiry Date, If any	:	Pull-Out Test.
l) अनुभाग कोड/Section Code	:	25CVAE3AN (Pages:3), 25MEA8F4N (Pages:4)_NABL
m) अनुभव प्रमाणपत्र संख्या/Section Certificate No.	:	25CVAE3AN_1, 25MEA8F4N_1_NABL
n) प्रमाणपत्र का प्रकार/Certificate Type	:	New
o) संदर्भ प्रमाणपत्र संख्या/Reference Certificate No.	:	
p) टिप्पणी/Remarks	:	Report uploaded

Venkatesh V R  
OIC SAMPLE CELL  
Signed on: 21 Jun, 2025 12:17 PM

Signature Not Verified

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TC-13137



ULR : TC1313725600001440F

Section Report No. : 25CVAE3AN\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	One sample identified as per the test request
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 2770(1)
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	No sampling is done
7.	पर्यावरण की स्थिति/Environmental Conditions	IS 2770(1)
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	IS 1786:2008
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

S Murali  
OIC Testing/Calibration Civil  
(Reviewed & Approved by)  
Signed on: 17 Jun, 2025 10:22 AM

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TC-13137



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Section Report No. : 25CVAE3AN\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	Compressive strength of concrete cubes (Avg) after 28 days for 0 to 12 mm	Compressive strength of concrete cubes (Avg) after 28 days for 0 to 12 mm	20.0	30.0	MPa	27.5 (MPa)

SENTHIL KUMAR M  
Lab Sc. Testing/Calibration Civil

S Murali  
OIC Testing/Calibration Civil  
(Reviewed & Approved by)  
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IS 1786 (2008)

Section Report No. : 25CVAE3AN\_1\_NABL

## Part D.

### REMARKS

Please see the test results

### Notes

Nil

S Murali

OIC Testing/Calibration Civil

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TC-13137



ULR : TC1313725700001382F

Section Report No. : 25MEA8F4N\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	Embossed on each sample of HSD Steel bar of nominal size 8mm as "JPR TMT BARS 550D ISI 8 677573".
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 1786: 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 & IS 2770 (Part 1) : 1967 (Reaffirmed 2022).
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	NA
7.	पर्यावरण की स्थिति/Environmental Conditions	Room Temperature 25.2°C
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	Universal Testing Machine, 1000kN.
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

**K P Elangovan**  
**OIC Testing/Calibration Mechanical (Testing/Calibration)**  
(Reviewed & Approved by)  
Signed on: 21 Jun, 2025 11:25 AM

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Testing/Calibration)





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TC-13137



ULR : TC1313725700001382F

Section Report No. : 25MEA8F4N\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	M_Pull out test for 0 to 12 mm	M_Pull out test for 0 to 12 mm	-	-	-	Please Refer Annexure A

**Annam Ashok**  
Lab Sc. Testing/Calibration Mechanical (Testing/  
Calibration)

**K P Elangovan**  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
(Reviewed & Approved by)  
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Section Code : 25MEA8F4N

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Annexure – A

Page no.: 1 of 1

**Identification Marks:** Embossed on the sample of HSD Steel Bar of Nominal Size 08 mm as “JPR TMT BARS 550D ISI 8 677573”.

As desired, the sample of “High Strength Deformed Steel Bar of nominal size 08 mm” has been tested as per IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

**RESULTS OF TESTS:**

**Pull out test (Comparative bond strength test as per Cl. 5 of IS 1786:2008).**

**Bond Stress (Average of 3 samples), in N/mm<sup>2</sup> at 28 days.**

Sl. No.	Nature of tests	Observed Values		Requirements of Cl. 5 of IS 1786:2008, (RA 2018) Amendment No. 4, July 2019 for Grade Fe 550D
1	Pull out test. (As per Cl. 5)	Plain bar	HSD steel bar (TMT bar)	
1.1	<b>Bond Stress at 0.025 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	4.06	7.55	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	86	<b>Bond Stress of deformed bar shall exceed minimum 40% against corresponding plain bar.</b>
1.2	<b>Bond Stress at 0.25 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	5.79	11.68	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	102	<b>Bond Stress of deformed bar shall exceed minimum 80% against corresponding plain bar.</b>
1.3	<b>Bond Stress at Ultimate Failure.</b> Bond Stress, N/mm <sup>2</sup>	6.83	12.89	---

**Note:** NA.

**Remark:** In respect of “Pull out Test” carried out, the sample meets the requirements of IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

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v.in-(OIC  
Testing/Calibration)

Annam Ashok  
Lab Sc. Testing/Calibration  
Mechanical (Testing/Calibration)

K P Elangovan  
OIC Testing/Calibration  
Mechanical (Testing/Calibration)  
(Reviewed & Approved by)





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TC-13137



ULR : TC1313725700001382F

Section Report No. : 25MEA8F4N\_1\_NABL

IS 1786 (2008)

## Part D.

### REMARKS

In respect of "Pull Out Test" carried out, the sample meets the requirements of IS 1786 : 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 for Grade Fe 550D.

### Notes

Disclaimer : 1. The information / data provided by the customer is clearly identified in the Test Report. The laboratory is not responsible for the information / data provided by the customer. 2. Conformity statement is based on the limiting values of the product specification of the tested parameters without considering the Measurement Uncertainty.

**K P Elangovan**

**OIC Testing/Calibration Mechanical (Testing/Calibration)**

(Reviewed & Approved by)

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TC-13137



ULR : TC1313725600001441F, TC1313725700001383F

**NABL A. PARTICULARS OF SAMPLE SUBMITTED**

**COMPLETE TEST CERTIFICATE**

भाग 'अ' जमा किये गये नमूने का विवरण

परीक्षण प्रमाणपत्र सं/Test Certificate No:  
**NABL/NTH(SR)/M(L)/25/7179\_1**

एस.आर.एफ. संख्या/SRF Number:  
**NTH(SR)/M(L)/25/7179**

जारी होने की तिथि/Date of issue  
**21 Jun, 2025**

कोड सं/QR Code  
**: NTH250089681**

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b) पता/Address	:	158,Kunnavakkam Village, Panruti Post., Kanchipuram, Kanchipuram, Tamil Nadu, India - 631604
c) ग्राहक का संदर्भ सं एवं दिनांक/Customer's Ref. No.	:	Letter No.Nil Dated 29.04.2025
d) नमूना मुहरबंद स्थिति/Sample Sealed Status	:	Not Sealed
e) परीक्षण सामग्री का विवरण/Description of Test item	:	JPR TMT Fe 550D Grade
f) नामपद्धति का विवरण/Description of Nomenclature	:	JPR TMT Bar of Nominal size 10mm
g) नमूने की विशिष्टता (यदि हो)/Product Specification(if any)	:	IS 1786 (2008)
h) नमूना प्राप्ति की तिथि /Date of Receipt of the Test item	:	08 May, 2025
i) कार्य निष्पादन की तिथि/Date(s)of Performance of Tests	:	From: 13 May, 2025 To: 21 Jun, 2025
j) परिमाण/Quantity	:	6.0 nos
k) कोई अन्य सूचना / अंतिम तिथि, यदि हो/Any other Information / Expiry Date, If any	:	Pull-Out Test.
l) अनुभाग कोड/Section Code	:	25CVEEFAN (Pages:3), 25MED52DN (Pages:4)_NABL
m) अनुभव प्रमाणपत्र संख्या/Section Certificate No.	:	25CVEEFAN_1, 25MED52DN_1_NABL
n) प्रमाणपत्र का प्रकार/Certificate Type	:	New
o) संदर्भ प्रमाणपत्र संख्या/Reference Certificate No.	:	
p) टिप्पणी/Remarks	:	Report uploaded

**Venkatesh V R**  
**OIC SAMPLE CELL**  
Signed on: 21 Jun, 2025 12:17 PM

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TC-13137



ULR : TC1313725600001441F

Section Report No. : 25CVEEFAN\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	One sample identified as per the test request
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 2770(1)
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	No sampling is done
7.	पर्यावरण की स्थिति/Environmental Conditions	IS 2770(1)
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	IS 1786:2008
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

S Murali  
OIC Testing/Calibration Civil  
(Reviewed & Approved by)  
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TC-13137



ULR : TC1313725600001441F

Section Report No. : 25CVEEFAN\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	Compressive strength of concrete cubes (Avg) after 28 days for 0 to 12 mm	Compressive strength of concrete cubes (Avg) after 28 days for 0 to 12 mm	20.0	30.0	MPa	27.5 (MPa)

SENTHIL KUMAR M  
Lab Sc. Testing/Calibration Civil

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OIC Testing/Calibration Civil  
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TC-13137



ULR : TC1313725600001441F

IS 1786 (2008)

Section Report No. : 25CVEEFAN\_1\_NABL

## Part D.

### REMARKS

Please see the test results

### Notes

Nil

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OIC Testing/Calibration Civil

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Tharamani, Chennai - 600113, Tamilnadu



TC-13137



ULR : TC1313725700001383F

Section Report No. : 25MED52DN\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	Embossed on each sample of HSD Steel bar of nominal size 10mm as "JPR TMT BARS 550D ISI 10 677573".
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 1786: 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 & IS 2770 (Part 1) : 1967 (Reaffirmed 2022).
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	NA
7.	पर्यावरण की स्थिति/Environmental Conditions	Room Temperature 25.2°C
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	Universal Testing Machine, 1000kN.
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

K P Elangovan  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
(Reviewed & Approved by)  
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Tharamani, Chennai - 600113, Tamilnadu



TC-13137



ULR : TC1313725700001383F

Section Report No. : 25MED52DN\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	M_Pull out test for 0 to 12 mm	M_Pull out test for 0 to 12 mm	-	-	-	Please Refer Annexure A

**Annam Ashok**  
Lab Sc. Testing/Calibration Mechanical (Testing/  
Calibration)

**K P Elangovan**  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
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Section Code : 25MED52DN

ULR : TC1313725700001383F

Annexure – A

Page no.: 1 of 1

**Identification Marks:** Embossed on the sample of HSD Steel Bar of Nominal Size 10 mm as “JPR TMT BARS 550D ISI 10 677573”.

As desired, the sample of “High Strength Deformed Steel Bar of nominal size 10 mm” has been tested as per IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

**RESULTS OF TESTS:**

**Pull out test (Comparative bond strength test as per Cl. 5 of IS 1786:2008).**

**Bond Stress (Average of 3 samples), in N/mm<sup>2</sup> at 28 days.**

Sl. No.	Nature of tests	Observed Values		Requirements of Cl. 5 of IS 1786:2008, (RA 2018) Amendment No. 4, July 2019 for Grade Fe 550D
1	Pull out test. (As per Cl. 5)	Plain bar	HSD steel bar (TMT bar)	
1.1	<b>Bond Stress at 0.025 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	4.52	7.73	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	71	<b>Bond Stress of deformed bar shall exceed minimum 40% against corresponding plain bar.</b>
1.2	<b>Bond Stress at 0.25 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	5.91	11.41	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	93	<b>Bond Stress of deformed bar shall exceed minimum 80% against corresponding plain bar.</b>
1.3	<b>Bond Stress at Ultimate Failure.</b> Bond Stress, N/mm <sup>2</sup>	7.21	12.15	---

**Note:** NA.

**Remark:** In respect of “Pull out Test” carried out, the sample meets the requirements of IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

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v.in-(OIC  
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Annam Ashok  
Lab Sc. Testing/Calibration  
Mechanical (Testing/Calibration)

K P Elangovan  
OIC Testing/Calibration  
Mechanical (Testing/Calibration)  
(Reviewed & Approved by)





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TC-13137



ULR : TC1313725700001383F

Section Report No. : 25MED52DN\_1\_NABL

IS 1786 (2008)

## Part D.

### REMARKS

In respect of "Pull Out Test" carried out, the sample meets the requirements of IS 1786 : 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 for Grade Fe 550D.

### Notes

Disclaimer : 1. The information / data provided by the customer is clearly identified in the Test Report. The laboratory is not responsible for the information / data provided by the customer. 2. Conformity statement is based on the limiting values of the product specification of the tested parameters without considering the Measurement Uncertainty.

**K P Elangovan**

**OIC Testing/Calibration Mechanical (Testing/Calibration)**

(Reviewed & Approved by)

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TC-13137



ULR : TC1313725600001442F, TC1313725700001384F

NABL A. PARTICULARS OF SAMPLE SUBMITTED

COMPLETE TEST CERTIFICATE

भाग 'अ' जमा किये गये नमूने का विवरण

परीक्षण प्रमाणपत्र सं/Test Certificate No:  
NABL/NTH(SR)/M(L)/25/7187\_1

एस.आर.एफ. संख्या/SRF Number:  
NTH(SR)/M(L)/25/7187

जारी होने की तिथि/Date of issue  
21 Jun, 2025

कोड सं/QR Code  
: NTH250089683

a) जिसे जारी करना है/Issued To	:	JEPPIAAR FURNACE AND STEELS PRIVATE LIMITED
b) पता/Address	:	158,Kunnavakkam Village, Panruti Post., Kanchipuram, Kanchipuram, Tamil Nadu, India - 631604
c) ग्राहक का संदर्भ सं एवं दिनांक/Customer's Ref. No.	:	Letter No.Nil Dated 29.04.2025
d) नमूना मुहरबंद स्थिति/Sample Sealed Status	:	Not Sealed
e) परीक्षण सामग्री का विवरण/Description of Test item	:	JPR TMT Fe 550D Grade
f) नामपद्धति का विवरण/Description of Nomenclature	:	JPR TMT Bar of Nominal size 12mm
g) नमूने की विशिष्टता (यदि हो)/Product Specification(if any)	:	IS 1786 (2008)
h) नमूना प्राप्ति की तिथि /Date of Receipt of the Test item	:	08 May, 2025
i) कार्य निष्पादन की तिथि/Date(s)of Performance of Tests	:	From: 13 May, 2025 To: 21 Jun, 2025
j) परिमाण/Quantity	:	6.0 nos
k) कोई अन्य सूचना / अंतिम तिथि, यदि हो/Any other Information / Expiry Date, If any	:	Pull-Out Test.
l) अनुभाग कोड/Section Code	:	25CV2A32N (Pages:3), 25ME0B8AN (Pages:4)_NABL
m) अनुभव प्रमाणपत्र संख्या/Section Certificate No.	:	25CV2A32N_1, 25ME0B8AN_1_NABL
n) प्रमाणपत्र का प्रकार/Certificate Type	:	New
o) संदर्भ प्रमाणपत्र संख्या/Reference Certificate No.	:	
p) टिप्पणी/Remarks	:	Report uploaded

Venkatesh V R  
OIC SAMPLE CELL  
Signed on: 21 Jun, 2025 12:18 PM

Signature Not Verified

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TC-13137



ULR : TC1313725600001442F

Section Report No. : 25CV2A32N\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	One sample identified as per the test request
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 2770(1)
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	No sampling is done
7.	पर्यावरण की स्थिति/Environmental Conditions	IS 2770(1)
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	IS 1786:2008
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

S Murali  
OIC Testing/Calibration Civil  
(Reviewed & Approved by)  
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IS 1786 (2008)

Section Report No. : 25CV2A32N\_1\_NABL

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	Compressive strength of concrete cubes (Avg) after 28 days for 0 to 12 mm	Compressive strength of concrete cubes (Avg) after 28 days for 0 to 12 mm	20.0	30.0	MPa	28.0 (MPa)

SENTHIL KUMAR M  
Lab Sc. Testing/Calibration Civil

S Murali  
OIC Testing/Calibration Civil  
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TC-13137



ULR : TC1313725600001442F

IS 1786 (2008)

Section Report No. : 25CV2A32N\_1\_NABL

## Part D.

### REMARKS

Please see the test results

### Notes

Nil

S Murali

OIC Testing/Calibration Civil

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TC-13137



ULR : TC1313725700001384F

Section Report No. : 25ME0B8AN\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	Embossed on each sample of HSD Steel bar of nominal size 12mm as "JPR TMT BARS 550D ISI 12 677573".
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 1786: 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 & IS 2770 (Part 1) : 1967 (Reaffirmed 2022).
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	NA
7.	पर्यावरण की स्थिति/Environmental Conditions	Room Temperature 25.2°C
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	Universal Testing Machine, 1000kN.
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

K P Elangovan  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
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TC-13137



ULR : TC1313725700001384F

Section Report No. : 25ME0B8AN\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	M_Pull out test for 0 to 12 mm	M_Pull out test for 0 to 12 mm	-	-	-	Please Refer Annexure A

**Annam Ashok**  
Lab Sc. Testing/Calibration Mechanical (Testing/  
Calibration)

**K P Elangovan**  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
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TC-13137

Section Code : 25ME0B8AN

ULR : TC1313725700001384F

Annexure – A

Page no.: 1 of 1

**Identification Marks:** Embossed on the sample of HSD Steel Bar of Nominal Size 12 mm as “JPR TMT BARS 550D ISI 12 677573”.

As desired, the sample of “High Strength Deformed Steel Bar of nominal size 12 mm” has been tested as per IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

**RESULTS OF TESTS:**

**Pull out test (Comparative bond strength test as per Cl. 5 of IS 1786:2008).**

**Bond Stress (Average of 3 samples), in N/mm<sup>2</sup> at 28 days.**

Sl. No.	Nature of tests	Observed Values		Requirements of Cl. 5 of IS 1786:2008, (RA 2018) Amendment No. 4, July 2019 for Grade Fe 550D
1	Pull out test. (As per Cl. 5)	Plain bar	HSD steel bar (TMT bar)	
1.1	<b>Bond Stress at 0.025 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	4.62	8.28	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	79	<b>Bond Stress of deformed bar shall exceed minimum 40% against corresponding plain bar.</b>
1.2	<b>Bond Stress at 0.25 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	5.79	11.57	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	100	<b>Bond Stress of deformed bar shall exceed minimum 80% against corresponding plain bar.</b>
1.3	<b>Bond Stress at Ultimate Failure.</b> Bond Stress, N/mm <sup>2</sup>	6.46	12.30	---

**Note:** NA.

**Remark:** In respect of “Pull out Test” carried out, the sample meets the requirements of IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

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v.in-(OIC  
Testing/Calibration)

Annam Ashok  
Lab Sc. Testing/Calibration  
Mechanical (Testing/Calibration)

K P Elangovan  
OIC Testing/Calibration  
Mechanical (Testing/Calibration)  
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Tharamani, Chennai - 600113, Tamilnadu



TC-13137



ULR : TC1313725700001384F

Section Report No. : 25ME0B8AN\_1\_NABL

IS 1786 (2008)

## Part D.

### REMARKS

In respect of "Pull Out Test" carried out, the sample meets the requirements of IS 1786 : 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 for Grade Fe 550D.

### Notes

Disclaimer : 1. The information / data provided by the customer is clearly identified in the Test Report. The laboratory is not responsible for the information / data provided by the customer. 2. Conformity statement is based on the limiting values of the product specification of the tested parameters without considering the Measurement Uncertainty.

**K P Elangovan**

**OIC Testing/Calibration Mechanical (Testing/Calibration)**

(Reviewed & Approved by)

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TC-13137



ULR : TC1313725600001443F, TC1313725700001385F

NABL A. PARTICULARS OF SAMPLE SUBMITTED

COMPLETE TEST CERTIFICATE

भाग 'अ' जमा किये गये नमूने का विवरण

परीक्षण प्रमाणपत्र सं/Test Certificate No:  
NABL/NTH(SR)/M(L)/25/7196\_1

एस.आर.एफ. संख्या/SRF Number:  
NTH(SR)/M(L)/25/7196

जारी होने की तिथि/Date of issue  
21 Jun, 2025

कोड सं/QR Code  
: NTH250089684

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b) पता/Address	:	158,Kunnavakkam Village, Panruti Post., Kanchipuram, Kanchipuram, Tamil Nadu, India - 631604
c) ग्राहक का संदर्भ सं एवं दिनांक/Customer's Ref. No.	:	Letter No.Nil Dated 29.04.2025
d) नमूना मुहरबंद स्थिति/Sample Sealed Status	:	Not Sealed
e) परीक्षण सामग्री का विवरण/Description of Test item	:	JPR TMT Fe 550D Grade
f) नामपद्धति का विवरण/Description of Nomenclature	:	JPR TMT Bar of Nominal size 16mm
g) नमूने की विशिष्टता (यदि हो)/Product Specification(if any)	:	IS 1786 (2008)
h) नमूना प्राप्ति की तिथि /Date of Receipt of the Test item	:	08 May, 2025
i) कार्य निष्पादन की तिथि/Date(s)of Performance of Tests	:	From: 13 May, 2025 To: 21 Jun, 2025
j) परिमाण/Quantity	:	6.0 nos
k) कोई अन्य सूचना / अंतिम तिथि, यदि हो/Any other Information / Expiry Date, If any	:	Pull-Out Test.
l) अनुभाग कोड/Section Code	:	25CV4AB2N (Pages:3), 25ME43FAN (Pages:4)_NABL
m) अनुभव प्रमाणपत्र संख्या/Section Certificate No.	:	25CV4AB2N_1, 25ME43FAN_1_NABL
n) प्रमाणपत्र का प्रकार/Certificate Type	:	New
o) संदर्भ प्रमाणपत्र संख्या/Reference Certificate No.	:	
p) टिप्पणी/Remarks	:	Report uploaded

Venkatesh V R  
OIC SAMPLE CELL  
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TC-13137



ULR : TC1313725600001443F

Section Report No. : 25CV4AB2N\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	One sample identified as per the test request
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 2770(1)
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	No sampling is done
7.	पर्यावरण की स्थिति/Environmental Conditions	IS 2770(1)
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	IS 1786:2008
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

S Murali  
OIC Testing/Calibration Civil  
(Reviewed & Approved by)  
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TC-13137



ULR : TC1313725600001443F

Section Report No. : 25CV4AB2N\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	Compressive strength of concrete cubes (Avg) after 28 days for 16 to 40 mm	Compressive strength of concrete cubes (Avg) after 28 days for 16 to 40 mm	20.0	30.0	MPa	28.0 (MPa)

**SENTHIL KUMAR M**  
Lab Sc. Testing/Calibration Civil

**S Murali**  
OIC Testing/Calibration Civil  
(Reviewed & Approved by)  
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IS 1786 (2008)

Section Report No. : 25CV4AB2N\_1\_NABL

## Part D.

### REMARKS

Please see the test results

### Notes

Nil

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TC-13137



ULR : TC1313725700001385F

Section Report No. : 25ME43FAN\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	Embossed on each sample of HSD Steel bar of nominal size 16mm as "JPR TMT BARS 550D ISI 16 677573".
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 1786: 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 & IS 2770 (Part 1) : 1967 (Reaffirmed 2022).
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	NA
7.	पर्यावरण की स्थिति/Environmental Conditions	Room Temperature 25.2°C
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	Universal Testing Machine, 1000kN.
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

K P Elangovan  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
(Reviewed & Approved by)  
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TC-13137



ULR : TC1313725700001385F

Section Report No. : 25ME43FAN\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	M_Pull out test for 16 to 40 mm	M_Pull out test for 16 to 40 mm_M	-	-	-	Please Refer Annexure A

**Annam Ashok**  
Lab Sc. Testing/Calibration Mechanical (Testing/  
Calibration)

**K P Elangovan**  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
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Section Code : 25ME43FAN

ULR : TC1313725700001385F

Annexure – A

Page no.: 1 of 1

**Identification Marks:** Embossed on the sample of HSD Steel Bar of Nominal Size 16 mm as “JPR TMT BARS 550D ISI 16 677573”.

As desired, the sample of “High Strength Deformed Steel Bar of nominal size 16 mm” has been tested as per IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

**RESULTS OF TESTS:**

**Pull out test (Comparative bond strength test as per Cl. 5 of IS 1786:2008).**

**Bond Stress (Average of 3 samples), in N/mm<sup>2</sup> at 28 days.**

Sl. No.	Nature of tests	Observed Values		Requirements of Cl. 5 of IS 1786:2008, (RA 2018) Amendment No. 4, July 2019 for Grade Fe 550D
1	Pull out test. (As per Cl. 5)	Plain bar	HSD steel bar (TMT bar)	
1.1	<b>Bond Stress at 0.025 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	4.19	8.23	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	96	<b>Bond Stress of deformed bar shall exceed minimum 40% against corresponding plain bar.</b>
1.2	<b>Bond Stress at 0.25 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	4.96	10.59	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	113	<b>Bond Stress of deformed bar shall exceed minimum 80% against corresponding plain bar.</b>
1.3	<b>Bond Stress at Ultimate Failure.</b> Bond Stress, N/mm <sup>2</sup>	5.54	11.13	---

**Note:** NA.

**Remark:** In respect of “Pull out Test” carried out, the sample meets the requirements of IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

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v.in-(OIC  
Testing/Calibration)

Annam Ashok  
Lab Sc. Testing/Calibration  
Mechanical (Testing/Calibration)

K P Elangovan  
OIC Testing/Calibration  
Mechanical (Testing/Calibration)  
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TC-13137



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Section Report No. : 25ME43FAN\_1\_NABL

IS 1786 (2008)

## Part D.

### REMARKS

In respect of "Pull Out Test" carried out, the sample meets the requirements of IS 1786 : 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 for Grade Fe 550D.

### Notes

Disclaimer : 1. The information / data provided by the customer is clearly identified in the Test Report. The laboratory is not responsible for the information / data provided by the customer. 2. Conformity statement is based on the limiting values of the product specification of the tested parameters without considering the Measurement Uncertainty.

**K P Elangovan**

**OIC Testing/Calibration Mechanical (Testing/Calibration)**

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TC-13137



ULR : TC1313725600001444F, TC1313725700001386F

NABL A. PARTICULARS OF SAMPLE SUBMITTED

COMPLETE TEST CERTIFICATE

भाग 'अ' जमा किये गये नमूने का विवरण

परीक्षण प्रमाणपत्र सं/Test Certificate No:  
NABL/NTH(SR)/M(L)/25/7161\_1

एस.आर.एफ. संख्या/SRF Number:  
NTH(SR)/M(L)/25/7161

जारी होने की तिथि/Date of issue  
21 Jun, 2025

कोड सं/QR Code  
: NTH250089686

a) जिसे जारी करना है/Issued To	:	JEPIAAR FURNACE AND STEELS PRIVATE LIMITED
b) पता/Address	:	158,Kunnavakkam Village, Panruti Post., Kanchipuram, Kanchipuram, Tamil Nadu, India - 631604
c) ग्राहक का संदर्भ सं एवं दिनांक/Customer's Ref. No.	:	Letter No.Nil Dated 29.04.2025
d) नमूना मुहरबंद स्थिति/Sample Sealed Status	:	Not Sealed
e) परीक्षण सामग्री का विवरण/Description of Test item	:	JPR TMT Fe 550D Grade
f) नामपद्धति का विवरण/Description of Nomenclature	:	JPR TMT Bar of Nominal size 20mm
g) नमूने की विशिष्टता (यदि हो)/Product Specification(if any)	:	IS 1786 (2008)
h) नमूना प्राप्ति की तिथि /Date of Receipt of the Test item	:	08 May, 2025
i) कार्य निष्पादन की तिथि/Date(s)of Performance of Tests	:	From: 13 May, 2025 To: 21 Jun, 2025
j) परिमाण/Quantity	:	6.0 nos
k) कोई अन्य सूचना / अंतिम तिथि, यदि हो/Any other Information / Expiry Date, If any	:	Pull-Out Test.
l) अनुभाग कोड/Section Code	:	25CV7022N (Pages:3), 25ME6AECN (Pages:4)_NABL
m) अनुभव प्रमाणपत्र संख्या/Section Certificate No.	:	25CV7022N_1, 25ME6AECN_1_NABL
n) प्रमाणपत्र का प्रकार/Certificate Type	:	New
o) संदर्भ प्रमाणपत्र संख्या/Reference Certificate No.	:	
p) टिप्पणी/Remarks	:	Report uploaded

Venkatesh V R  
OIC SAMPLE CELL  
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TC-13137



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Section Report No. : 25CV7022N\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	One sample identified as per the test request
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 2770(1)
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	No sampling is done
7.	पर्यावरण की स्थिति/Environmental Conditions	IS 2770(1)
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	IS 1786:2008
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

**S Murali**  
**OIC Testing/Calibration Civil**  
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TC-13137



ULR : TC1313725600001444F

Section Report No. : 25CV7022N\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	Compressive strength of concrete cubes (Avg) after 28 days for 16 to 40 mm	Compressive strength of concrete cubes (Avg) after 28 days for 16 to 40 mm	20.0	30.0	MPa	28.0 (MPa)

SENTHIL KUMAR M  
Lab Sc. Testing/Calibration Civil

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Section Report No. : 25CV7022N\_1\_NABL

IS 1786 (2008)

## Part D.

### REMARKS

Please see the test results

### Notes

Nil

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TC-13137



ULR : TC1313725700001386F

Section Report No. : 25ME6AECN\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	Embossed on each sample of HSD Steel bar of nominal size 20mm as "JPR TMT BARS 550D ISI 20 677573".
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 1786: 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 & IS 2770 (Part 1) : 1967 (Reaffirmed 2022).
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	NA
7.	पर्यावरण की स्थिति/Environmental Conditions	Room Temperature 25.2°C
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	Universal Testing Machine, 1000kN.
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

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OIC Testing/Calibration Mechanical (Testing/Calibration)  
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TC-13137



ULR : TC1313725700001386F

Section Report No. : 25ME6AECN\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	M_Pull out test for 16 to 40 mm	M_Pull out test for 16 to 40 mm_M	-	-	-	Please Refer Annexure A

**Annam Ashok**  
Lab Sc. Testing/Calibration Mechanical (Testing/  
Calibration)

**K P Elangovan**  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
(Reviewed & Approved by)  
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Section Code : 25ME6AECN

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Annexure – A

Page no.: 1 of 1

**Identification Marks:** Embossed on the sample of HSD Steel Bar of Nominal Size 20 mm as “JPR TMT BARS 550D ISI 20 677573”.

As desired, the sample of “High Strength Deformed Steel Bar of nominal size 20 mm” has been tested as per IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

**RESULTS OF TESTS:**

**Pull out test (Comparative bond strength test as per Cl. 5 of IS 1786:2008).**

**Bond Stress (Average of 3 samples), in N/mm<sup>2</sup> at 28 days.**

Sl. No.	Nature of tests	Observed Values		Requirements of Cl. 5 of IS 1786:2008, (RA 2018) Amendment No. 4, July 2019 for Grade Fe 550D
1	Pull out test. (As per Cl. 5)	Plain bar	HSD steel bar (TMT bar)	
1.1	<b>Bond Stress at 0.025 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	4.28	7.82	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	83	<b>Bond Stress of deformed bar shall exceed minimum 40% against corresponding plain bar.</b>
1.2	<b>Bond Stress at 0.25 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	5.25	10.61	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	102	<b>Bond Stress of deformed bar shall exceed minimum 80% against corresponding plain bar.</b>
1.3	<b>Bond Stress at Ultimate Failure.</b> Bond Stress, N/mm <sup>2</sup>	5.74	10.99	---

**Note:** NA.

**Remark:** In respect of “Pull out Test” carried out, the sample meets the requirements of IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

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Annam Ashok  
Lab Sc. Testing/Calibration  
Mechanical (Testing/Calibration)

K P Elangovan  
OIC Testing/Calibration  
Mechanical (Testing/Calibration)  
(Reviewed & Approved by)





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ULR : TC1313725700001386F

Section Report No. : 25ME6AECN\_1\_NABL

IS 1786 (2008)

## Part D.

### REMARKS

In respect of "Pull Out Test" carried out, the sample meets the requirements of IS 1786 : 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 for Grade Fe 550D.

### Notes

Disclaimer : 1. The information / data provided by the customer is clearly identified in the Test Report. The laboratory is not responsible for the information / data provided by the customer. 2. Conformity statement is based on the limiting values of the product specification of the tested parameters without considering the Measurement Uncertainty.

**K P Elangovan**

**OIC Testing/Calibration Mechanical (Testing/Calibration)**

(Reviewed & Approved by)

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TC-13137



ULR : TC1313725600001444F, TC1313725700001386F

NABL A. PARTICULARS OF SAMPLE SUBMITTED

COMPLETE TEST CERTIFICATE

भाग 'अ' जमा किये गये नमूने का विवरण

परीक्षण प्रमाणपत्र सं/Test Certificate No:  
NABL/NTH(SR)/M(L)/25/7161\_1

एस.आर.एफ. संख्या/SRF Number:  
NTH(SR)/M(L)/25/7161

जारी होने की तिथि/Date of issue  
21 Jun, 2025

कोड सं/QR Code  
: NTH250089686

a) जिसे जारी करना है/Issued To	:	JEPPIAAR FURNACE AND STEELS PRIVATE LIMITED
b) पता/Address	:	158,Kunnavakkam Village, Panruti Post., Kanchipuram, Kanchipuram, Tamil Nadu, India - 631604
c) ग्राहक का संदर्भ सं एवं दिनांक/Customer's Ref. No.	:	Letter No.Nil Dated 29.04.2025
d) नमूना मुहरबंद स्थिति/Sample Sealed Status	:	Not Sealed
e) परीक्षण सामग्री का विवरण/Description of Test item	:	JPR TMT Fe 550D Grade
f) नामपद्धति का विवरण/Description of Nomenclature	:	JPR TMT Bar of Nominal size 20mm
g) नमूने की विशिष्टता (यदि हो)/Product Specification(if any)	:	IS 1786 (2008)
h) नमूना प्राप्ति की तिथि /Date of Receipt of the Test item	:	08 May, 2025
i) कार्य निष्पादन की तिथि/Date(s)of Performance of Tests	:	From: 13 May, 2025 To: 21 Jun, 2025
j) परिमाण/Quantity	:	6.0 nos
k) कोई अन्य सूचना / अंतिम तिथि, यदि हो/Any other Information / Expiry Date, If any	:	Pull-Out Test.
l) अनुभाग कोड/Section Code	:	25CV7022N (Pages:3), 25ME6AECN (Pages:4)_NABL
m) अनुभव प्रमाणपत्र संख्या/Section Certificate No.	:	25CV7022N_1, 25ME6AECN_1_NABL
n) प्रमाणपत्र का प्रकार/Certificate Type	:	New
o) संदर्भ प्रमाणपत्र संख्या/Reference Certificate No.	:	
p) टिप्पणी/Remarks	:	Report uploaded

Venkatesh V R  
OIC SAMPLE CELL  
Signed on: 21 Jun, 2025 12:19 PM

Signature Not Verified

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TC-13137



ULR : TC1313725600001444F

Section Report No. : 25CV7022N\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	One sample identified as per the test request
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 2770(1)
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	No sampling is done
7.	पर्यावरण की स्थिति/Environmental Conditions	IS 2770(1)
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	IS 1786:2008
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

S Murali  
OIC Testing/Calibration Civil  
(Reviewed & Approved by)  
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Section Report No. : 25CV7022N\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	Compressive strength of concrete cubes (Avg) after 28 days for 16 to 40 mm	Compressive strength of concrete cubes (Avg) after 28 days for 16 to 40 mm	20.0	30.0	MPa	28.0 (MPa)

**SENTHIL KUMAR M**  
Lab Sc. Testing/Calibration Civil

**S Murali**  
OIC Testing/Calibration Civil  
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IS 1786 (2008)

## Part D.

### REMARKS

Please see the test results

### Notes

Nil

S Murali

OIC Testing/Calibration Civil

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Section Report No. : 25ME6AECN\_1\_NABL

IS 1786 (2008)

NABL B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test report, if any.	Not Applicable
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	Not Applicable
4.	परीक्षण सामग्री की पहचान/identification of Test item	Embossed on each sample of HSD Steel bar of nominal size 20mm as "JPR TMT BARS 550D ISI 20 677573".
5.	व्यावर्त की प्राणाली की पहचान/Method(s) used for Test	IS 1786: 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 & IS 2770 (Part 1) : 1967 (Reaffirmed 2022).
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	NA
7.	पर्यावरण की स्थिति/Environmental Conditions	Room Temperature 25.2°C
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	Universal Testing Machine, 1000kN.
9.	कैलिब्रेशन स्थल/Site of Calibration	NA
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	NA

K P Elangovan  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
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Section Report No. : 25ME6AECN\_1\_NABL

IS 1786 (2008)

NABL C. TEST RESULT

S.No.	Clause No Table No. Sl. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.7	M_Pull out test for 16 to 40 mm	M_Pull out test for 16 to 40 mm_M	-	-	-	Please Refer Annexure A

**Annam Ashok**  
Lab Sc. Testing/Calibration Mechanical (Testing/  
Calibration)

**K P Elangovan**  
OIC Testing/Calibration Mechanical (Testing/Calibration)  
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TC-13137

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Annexure – A

Page no.: 1 of 1

**Identification Marks:** Embossed on the sample of HSD Steel Bar of Nominal Size 20 mm as “JPR TMT BARS 550D ISI 20 677573”.

As desired, the sample of “High Strength Deformed Steel Bar of nominal size 20 mm” has been tested as per IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

**RESULTS OF TESTS:**

**Pull out test (Comparative bond strength test as per Cl. 5 of IS 1786:2008).**

**Bond Stress (Average of 3 samples), in N/mm<sup>2</sup> at 28 days.**

Sl. No.	Nature of tests	Observed Values		Requirements of Cl. 5 of IS 1786:2008, (RA 2018) Amendment No. 4, July 2019 for Grade Fe 550D
1	Pull out test. (As per Cl. 5)	Plain bar	HSD steel bar (TMT bar)	
1.1	<b>Bond Stress at 0.025 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	4.28	7.82	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	83	<b>Bond Stress of deformed bar shall exceed minimum 40% against corresponding plain bar.</b>
1.2	<b>Bond Stress at 0.25 mm slip.</b> i. Bond Stress, N/mm <sup>2</sup>	5.25	10.61	---
	ii. Percentage increase in Bond Stress of deformed bar against corresponding plain bar, %.	---	102	<b>Bond Stress of deformed bar shall exceed minimum 80% against corresponding plain bar.</b>
1.3	<b>Bond Stress at Ultimate Failure.</b> Bond Stress, N/mm <sup>2</sup>	5.74	10.99	---

**Note:** NA.

**Remark:** In respect of “Pull out Test” carried out, the sample meets the requirements of IS 1786:2008 (Reaffirmed 2018) Amendment No. 4, July 2019 for Grade Fe 550D.

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kpelangovan@nth.go  
v.in-(OIC  
Testing/Calibration)

Annam Ashok  
Lab Sc. Testing/Calibration  
Mechanical (Testing/Calibration)

K P Elangovan  
OIC Testing/Calibration  
Mechanical (Testing/Calibration)  
(Reviewed & Approved by)





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IS 1786 (2008)

## Part D.

### REMARKS

In respect of "Pull Out Test" carried out, the sample meets the requirements of IS 1786 : 2008 (Reaffirmed 2018), Amendment No. 4, July 2019 for Grade Fe 550D.

### Notes

Disclaimer : 1. The information / data provided by the customer is clearly identified in the Test Report. The laboratory is not responsible for the information / data provided by the customer. 2. Conformity statement is based on the limiting values of the product specification of the tested parameters without considering the Measurement Uncertainty.

**K P Elangovan**

**OIC Testing/Calibration Mechanical (Testing/Calibration)**

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