

Post-Tensioning Institute Union Ironworkers Certification Program



OCTOBER 1, 2022

1 Purpose and Scope

The purpose of the Post Tensioning Institute Ironworker Certification Program is to improve and standardize the knowledge, skill and quality of the union ironworkers placing post-tensioning (PT) systems on PT reinforced concrete construction projects across the United States and Canada. This Program Manual details the requirements and procedures of the program.

2 Training

The training requirements for apprentice, and journeyman ironworkers shall be followed by each local union before certification testing can be administered. The curriculum, scope and format outlined in the Union's approved current Unbonded, and Multistrand and Grouted training manuals must be followed.

2.1 Minimum training requirements for certification testing

- 2.1.1 Apprentices shall receive 40 hours of training in unbonded PT and 20 hours for Multi-Strand and Grouted PT
- 2.1.2 Journeyman shall receive 24 hours of training in unbonded PT and 20 hours for Multi-Strand and Grouted PT.
- 2.1.3 An accelerated 16-hour course for single strand unbonded PT certification is approved and available for ironworkers meeting the field experience requirements as explained below. This experience must be properly submitted using the work experience affidavit form prior to being allowed to take the certification exam. Otherwise, the full required training must be used.
 - A minimum of **2000** hours of unbonded post-tensioning field work **within the past 5 years** -OR-
 - A minimum of **4000** hours of unbonded post-tensioning field work **during the person's lifetime**

3 Testing and Certification

3.1 Testing

- 3.1.1 Upon completion of the formal classroom training, students will qualify to take the exam for the type of certification(s) applied for:
 - PTI's 90 question multiple choice Unbonded PT Ironworker Certification exam
 - PTI's 60 question multiple choice Multistrand & Grouted (M&G) PT Ironworker Certification Exam

3.2 Levels of Certification

3.2.1 Level 1 Certification – Students scoring 70% to 79% on the respective exams will receive a Level 1 certification for the type of PT test taken

3.2.1.1 Students who score in the Level 1 range can re-take the exam at any time during the first year to try to and upgrade to Level 2 status. If the student fails the re-take, the Level 1 certification will remain.

3.2.2 Level 2 Certification – Students scoring 80% or greater on the respective exam and meeting the specific field experience requirements will receive a Level 2 certification for the type of PT test taken after submittal of the field work affidavit. Individuals have 4 years to gain the necessary experience and submit the field work affidavit.

3.2.2.1 Level 2 Experience Requirements

- Level 2 Unbonded - requires a minimum of 500 hours field experience working on unbonded post-tensioning projects, with a minimum of 150 hours installing, and a minimum of 150 hours stressing.
- Level 2 Multistrand & Grouted (M&G) – requires a minimum of 1,500 hours field experience working on M&G PT projects, including a minimum of 250 hours performing each: Installing, and stressing, and grouting.
- Students scoring 80% or higher on the respective exams that do not meet the respective field experience requirements will receive a Level 1 certification for each respective program (unbonded and multistrand & grouted). Upon completion of the required field experience, the work experience affidavit can be sent to PTI within the first 4 years and the Individual will be upgraded to a Level 2 certification at no additional charge.
- Verification of field experience will be in the form of an affidavit (Provided by PTI or downloaded from the PTI website) completed and signed by the individual requesting certification. The field experience affidavit will need to be verified and signed by two people including either by the individual's employer representative, Union Coordinator, or Local Union Officer. This field experience can be obtained at any time before, during, or after the formal classroom training; however, Level 2 Certification will not be issued to any individual prior to PTI receiving the properly completed affidavit of completion of the required field experience.

Certification	Training	Exam Score	Experience Required
Unbonded PT Ironworker			
Level 1	24 hours	≥ 70%	None
Level 2	24 hours	≥ 80%	500 total hours – minimum 150 installing, and minimum 150 stressing
Multistrand & Grouted PT Ironworker			
Level 1	20 hours	≥ 70%	None
Level 2	20 hours	≥ 80%	1500 total hours – minimum 250 in each in: Installation, and stressing, and grouting.

4 Instructors and Test Administrators

4.1 Instructors

Instructors teaching the required certification course content must be knowledgeable and up to date with current industry practices and procedures. The PTI and Ironworkers will maintain a list of qualified and approved instructors meeting specific requirements.

4.1.1 Instructor requirements:

- Completion of a “train the trainer” course provided by the Ironworkers National Training Fund for the same type of PT they will be teaching.
- Maintain current certification of the same type of PT they will be teaching
- Sign an acknowledgement that they have read, understand, and agree to the requirements of this Program Manual.

4.2 Exam Administrators

Exam Administrators are essential in maintaining the integrity of the testing process and the validity of the certification program. Therefore, they must meet specific requirements.

4.2.1 Exam Administrator requirements

- The person administering the exam shall not be the same person who conducted training for students taking the exam.
- They must sign an acknowledgement that they have read, understand, and agree to the requirements of this Program Manual.
- Prior to administering each exam session, they must read, and sign the Ironworker Exam Administrator Procedures Acknowledgement form. The signed form shall be returned with each group of tests proctored.

5 Procedures

To facilitate administration and protect the integrity of the Certification Program, PTI and the Ironworkers Union has adopted the following procedures applicable to initial certification of Ironworker apprentices and Journeymen. These procedures must be followed by the Union Coordinator, PT Instructor, and Exam Administrator throughout the entire process for training, requesting exams, testing, and for returning exams. Certification exams and renewals requested by Iron Worker Locals will be billed directly to the Ironworkers Apprenticeship and Training Department and at no cost to the Locals. To ensure the integrity of the certification program, the PTI and IWNF reserve the right to have an individual on site to monitor or administer the exam. PTI's Union Ironworker Certification Program information and documents are available to download from a dedicated web page located at <https://www.post-tensioning.org/certification/ptiironworkercertification.aspx>.

5.1 Exam Requests

- 5.1.1 At least 10 days prior to the planned testing date, the coordinator or PT instructor from the Union Local must complete and submit an Exam Request form (**Appendix A**) to the Post Tensioning Institute.
- 5.1.2 The Post Tensioning Institute will ship the exams, and forms along with a return shipping label to arrive at the requested location prior to the date of testing.

5.2 Exam Administration

- 5.2.1 Exam Administrators must meet the requirements of this Program Manual
- 5.2.2 The exam administrator shall read, follow, and sign the Testing Procedures and Rules Acknowledgement form (**Exhibit B**) and return it to the PTI with the completed exams.
- 5.2.3 The Union Coordinator will be required to certify to PTI that all program requirements have been met by signing each exam answer form.
- 5.2.4 Once the students have completed the examination(s), the student must sign the test form, and return it along with all other test materials, including worksheet paper to the Exam Administrator.
- 5.2.5 Any secure online, LMS, or Agency testing shall be done according to the Post Tensioning Institutes rules and requirements.

5.3 Returning Exams and Results

- 5.3.1 The coordinator will compile all parts of the examination and review the paperwork for clarity, completeness of information and for the required signature(s). The coordinator will then sign the certification statement regarding classroom-training time and administration of the test.
- 5.3.2 Any completed Work Experience Affidavits for field experience requirements should be attached to the respective students' exam sheets.
- 5.3.3 All testing materials are the property of the PTI. All testing materials are to be secured and are to be returned promptly within one week of the scheduled test date.
- 5.3.4 PTI will grade the examinations, compile the results, and return certification documents to the Apprentice Coordinator for distribution to the students. Typical processing takes 2-3 weeks after exams are delivered to PTI.
- 5.3.5 The Apprentice Coordinator shall ensure that all certification results are entered into the Ironworkers Apprentice Tracking System.

5.4 Renewal of Certifications

PTI Certification for Field Personnel is valid for 4 (four) years and can be renewed every 4 (four) years as outlined below.

5.4.1 Renewal Policy

- 5.4.1.1 Requests for renewal must be obtained by PTI within 3 months before (for renewal) and 3 months after (for reinstatement) the certification expiration date that is shown on the certification card. NO Exceptions will be granted for late renewals. Early renewal may be acceptable under some circumstances at the discretion of the PTI.
- 5.4.1.2 If the certification renewal is not requested within the specified period, the renewal is no longer available and attendance of another certification workshop and exam will be required.
- 5.4.1.3 The apprentice coordinator must contact PTI to request certification renewals (**Appendix C or online form located at <https://www.post-tensioning.org/certification/ptiironworkercertification.aspx>**). The renewal fee will be direct billed to the Apprenticeship and Training Department. Members who register for renewal online will be required to pay the renewal fee out of pocket.
- 5.4.1.4 Applicant will have two attempts on the renewal exam within 30 days of the email exam invite. If you fail to complete the exam within the 30 days, you may be eligible to re-purchase the online examination if you are still inside the 3-month grace period. If you fail your second attempt, you must attend another certification workshop and pass the written exam to become certified with PTI again.
- 5.4.1.5 If you attempt to renew a Level 2 certification, you have two attempts to achieve an 80% on the renewal exam. If you score between 70 - 79% on the Level 2 renewal exam, you will receive Level 1 certification. To then achieve Level 2 certification, you must then attend another certification workshop and pass the written exam with a minimum of 80%.
- 5.4.2 Initial 4-year renewal requirements
 - The coordinator requests renewal from the PTI
 - The applicant must successfully complete the online renewal examination within the allowed period.
- 5.4.3 Subsequent 4-year (8, 12, 16, etc. years) renewal requirements
 - The coordinator requests renewal from the PTI
 - Successfully complete the online webinar and renewal examination
 - Level 2 renewal requires continuing field experience of 25% the amount required for initial Level 2 certification to be obtained during the previous 4-year certification period.
 - If the continuing PT work experience required for Level 2 certification is not documented within the 4-year initial certification period, the renewal will only be at Level 1. To attain Level 2 certification after the initial renewal, attendance of another certification workshop is required.

Post-Tensioning Institute Union Ironworkers Certification Program Manual Acknowledgement of Requirements and Duty to Perform

I _____ have read the entire contents of this certification program manual. I understand and agree to follow all provisions and procedures contained herein.

Furthermore, I agree to follow the Ironworkers curriculum for either Bonded or Unbonded Post Tensioning as applicable when I instruct these courses. I also agree to administer all certification tests according to the required procedures, always making every effort to ensure the integrity of the exam and the certifications issued by this program.

Print Name

Signature

Date

Appendix A

Exam Request and Training Notification

Exam Request and Training Notification

The Ironworkers Post Tensioning Institute (PTI) certification program requires that the training program notify the PTI of upcoming training and testing at least 10 business days prior to the date of testing. This form is to be completed by the Apprenticeship Coordinator and submitted to the PTI. See program manual for instructor and exam administrator requirements.

Type of exams requested:

- ☐ Unbonded
☐ Bonded

Number of exams requested: English _____ Date of Testing: _____
Spanish _____

Local Training Program: _____

Address to ship exams: _____

Qualifying training:

- ☐ 40 hours Apprentice unbonded
☐ 24 hours unbonded
☐ 16 hours accelerated unbonded
☐ 20 hours bonded

Qualified Instructor: _____

PTI certification expiration: _____

Qualified Exam Administrator: _____

Coordinator Signature: _____ Date: _____

Submit this completed form to:

Certification Projects Coordinator
Post Tensioning Institute
pticertification@post-tensioning.org
Phone: (248) 848-3183

Appendix B

Testing Procedures and Rules

DRAFT

Post-Tensioning Institute Union Ironworkers Certification Program Testing Procedures, and Rules

These requirements are for the purpose of ensuring proper instruction of Ironworker Post-Tensioning courses and to maintain the integrity of certifications issued under the Post Tensioning Institute Union Ironworkers Certification Program.

Instructors and Exam Administrators

1. Instructors and exam administrators must meet requirements as detailed in the program documents
2. Exam materials are to be secured and are only to be handled by the exam administrator to ensure that the test questions are not compromised.
3. Instructors and exam administrators are not allowed to review the test booklets, write down questions or to make copies of the tests.
4. Exams are only to be administered to qualified members meeting the minimum training requirements; identification of applicants shall be verified.
5. Review the completed exam/application making sure all information is complete, the correct version of the exam booklet is indicated, and it has been signed by the Coordinator and applicant.
6. Sign the acknowledgement at the bottom of this form and return it to the PTI with the tests.

Testing Procedures and Rules – Read to applicants prior to handing out the test

1. Exams may not be administered to relatives or applicants working for the same employer.
2. Inspect the room to make sure all notes are erased from the board and all related posted information has been taken down or covered.
3. Arrange seating to discourage cheating, have a space in between students if possible; a U-shape provides the administrator with a clear view of all students.
4. This is a “closed book test”, all materials must be removed from the student’s desk. Blank scratch paper may be provided for working problems, any such paper must be collected and destroyed after the exam.
5. The use of a standard calculator is permitted, cell phones or other electronic devices are not.
6. Prior to handing out the exam, a brief restroom/drink break shall be provided. Students will not be allowed to leave the room until their exam has been completed and collected, or in case of emergency as approved by the exam administrator.
7. When handing out the test, make sure students adjacent to each other have different versions. Have students verify that the test # on the booklet matches the test # on the answer sheet.
8. Have applicants fill out and sign the Application for Certification.
9. Students are not allowed to talk or communicate with anyone during the exam.
10. The exam administrator is not allowed to answer questions about the content of the test, only questions relating to the testing procedure may be answered.
11. Exams are to be collected immediately upon completion and secured for return to the PTI.

I certify that all provisions above have been followed, and that I have made every effort to ensure the integrity of the exam and certifications issued under the PTI’s Union Ironworkers certification program.

Test Location and Local#

Date

Exam Administrator (PRINT NEATLY)

Signature

Appendix C

Certification Renewal Request Form



POST-TENSIONING
INSTITUTE®

38800 Country Club Drive
Farmington Hills, MI 48331
248-848-3180
<http://www.post-tensioning.org>
pticertification@post-tensioning.org



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INSTITUTE®

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Fax: (248) 848-3181
www.post-tensioning.org

PTI Certification of Field Personnel

APPLICATION FOR PTI CERTIFICATION RENEWAL

*PLEASE PRINT LEGIBLY AND COMPLETE ALL REQUESTED INFORMATION.
ALL INFORMATION GIVEN WILL BE HELD IN STRICT CONFIDENCE.*

NAME	First	Initial	Last	Suffix
HOME STREET ADDRESS				
CITY			STATE	ZIP
TEL. NO. ()			E-MAIL	
Last 4 Digits of Your Social Security No.				

CURRENT EMPLOYMENT

COMPANY NAME		
ADDRESS		
CITY	STATE	ZIP
PLEASE CHECK ALL THAT APPLY		
INSTALLER / IRONWORKER <input type="checkbox"/>	SUPERVISOR <input type="checkbox"/>	COORDINATOR / INSTRUCTOR <input type="checkbox"/>

UNION INFORMATION

UNION LOCAL NO.		
ADDRESS		
CITY	STATE	ZIP
TEL. NO. ()	FAX ()	

CERTIFICATION INFORMATION

DESIRED CERTIFICATION RENEWAL(S) <i>PLEASE CHECK ALL THAT APPLY:</i>	CURRENT CERTIFICATION EXPIRATION DATE	CERTIFICATION ID No.
<input type="checkbox"/> LEVEL 1 UNBONDED PT IRONWORKER		
<input type="checkbox"/> LEVEL 2 UNBONDED PT IRONWORKER		
<input type="checkbox"/> LEVEL 1 BONDED PT IRONWORKER		
<input type="checkbox"/> LEVEL 2 BONDED PT IRONWORKER		

I hereby certify that the above information is true and correct. I understand that falsifying information on this document could result in revocation of my PTI certification(s).

APPLICANT'S SIGNATURE

DATE