



CERTIFICATION PROGRAM FOR
CERTIFIED GEOTHERMAL
INSPECTOR



Certified Geothermal Inspector

PRESENTED BY
THE INTERNATIONAL GROUND SOURCE
HEAT PUMP ASSOCIATION

APPLICATION PART A: POLICY

1. OBJECTIVES

To raise the professional standards of those engaged in geothermal heat pump inspection.

To improve the practice of Ground Source Heat Pump (GSHP) implementation by encouraging professionals in a continuing education program of professional development.

To identify persons with acceptable knowledge of the principles and practices of geothermal heat pump system related disciplines and laws governing and effecting geothermal heat pump systems through completing an examination and fulfilling prescribed standards of performance and conduct.

To award special recognition to those professionals who have demonstrated a high level of competence and ethical fitness for inspection of GSHP systems.

2. ELIGIBILITY

Professionals with one of the following prerequisites may apply for the certification:

- A 4-year mechanical engineering graduate and/or P.E. or R.A. with three years of verified experience in geothermal heat pump system project design or installation.
- Any other four year technical or non-technical degree with five years of verified experience in geothermal heat pump system project design or installation.
- Current IGSHPA trained professional.
- Three years of verified experience in building inspection.

If you do not meet the minimum requirements, see item 6 below – CGI In-training.

3. THE REQUIRED BODY OF KNOWLEDGE

The effective practice of geothermal heat pump inspection requires in-depth knowledge of a wide variety of subjects. However, the candidate need only demonstrate to the satisfaction of the certification board the knowledge and ability to apply the essentials of geothermal heat pumps.



4. TRAINING

In order to take the CGI exam, the candidate must attend an IGSHPA Inspectors training.

5. PROCEDURES

The first step in the CGI application process is to register for the training through IGSHPA Certification applications which can be obtained through the IGSHPA website. The application may be typed or completed by hand. Certification is based on education and/or geothermal work experience, project inspection experience, and passing the examination.

- Should applicants have doubts about their experience prerequisite for certification, he/she can have his/her application reviewed by the CGI Board prior to taking the exam.

It is very important that all applicants give clear and complete details concerning commercial geothermal heat pump system project design. The CGI Board must have a clear understanding of the applicant's experience.

Once the application is complete and the exam is passed, all applications are sent to the CGI Board. The CGI Board reviews the application and gives final approval for certification status.

6. THE APPLICATION

The application provides an organized method for documenting professional and educational background.

The personal data form is divided into the following three parts:

- Education
- Professional Registration
- Experience and Activities

The applicant is requested to list on the application all pertinent information in these categories for evaluation by the CGI Board.

To be awarded the CGI designation, candidates must achieve a pass rate of 70 % on the examination. Applicants that do not receive certification status can request that their applications be resubmitted to the CGI Board, if his/her education or experience level changes.

CGI In-training:

Any candidate who does not meet the experience requirements, but takes the training and passes the exam will be awarded the **CGI In-training**. When the candidate meets the experience requirement, they then submit the employment verification to the certification manager to be considered by the board for certification.

It is essential that candidates devote considerable time and effort to completing the application since certification by the CGI Board can be based only on the information provided. Inaccurate and/or incomplete data will only be detrimental for the



applicant. Documentation should be attached to the application to substantiate the information presented.

7. THE CGI EXAMINATION

The examination will be administered by IGSHPA through an online exam.

The examination questions are based on concepts and experiences basic to geothermal heat pump application and on supplemental reading. **The Exam is Open Book!**

All questions on the written examination are mandatory. The questions are multiple choice and true/false. Grading is accomplished electronically.

The written CGI Examination deals with such subject(s) as:

1. Codes and Standards
2. System Solutions
3. GHEX materials and installation methods
4. Commercial field layout
5. Installation and Grout/Considerations
6. Site awareness, plan and drawings
7. Environmental Impact
8. System startup and commissioning

8. MAINTAINING CERTIFICATION

The continued education of professionals is essential to enable them to cope with rapidly changing conditions. Therefore, to remain certified as a CGI Professional, you must accumulate 8 professional credits every three years and submit a completed recertification form to IGSHPA. Each CGI reaches the recertification date on the fourth January 1st following the date appearing on the certificate attesting to certification. Professional credits for recertification can be accumulated any time from the date receiving certification to the December immediately preceding the recertification date. Example: professionals certified by examination and receiving a certification in 2015, file a record of eight professional credits with IGSHPA by December 31, 2018.

Activities for CGI Credits

Continued employment in a combined geothermal heat pump design or inspection, heating, ventilation and air-conditioning: **4 credits** for 3 years

Membership in a professional engineering society: **One credit per year up to 3 credits**

Continuing education/professional activities in geothermal heat pump design or inspection, heating, ventilation and air-conditioning: **credits** (Per CEU, college credits hour or 10 contact hours for seminars).

9. LIFETIME CERTIFICATION

CGI upon retiring and/or reaching the age of sixty-two is certified for life. No further reporting is necessary except to notify the certification manager of meeting the age requirement by sending a copy of their driver's license.



10.

SUSPENSION OR REVOCATION OF CERTIFICATION

Professionals that do not accumulate the required professional credits, certification shall terminate, unless in the judgment of the certification board, extenuating circumstances exist and the deficiency can be readily overcome.

Certification may be revoked for failure to abide by IGSHPA bylaws. The professional is offered a hearing by the certification board and notified of the views of the complainant and of the hearing date and location. This notice shall be given in writing at least thirty days in advance of the hearing.

11. REINSTATEMENT OF CGI

Professionals who do not acquire sufficient CGI maintenance credits to be recertified on recertification date will be notified in writing of suspension from using the CGI designation and will no longer be listed as a CGI in any IGSHPA publication until such time that the professional:

- Resubmits to the certification process and successfully meets the criteria for certification by personal data information and examination or,
- Acquires make-up points at a cumulative total, equal to 3 per year for every year since the last date of certification.

12. FEES

Application Fees

IGSHPA training fees include application fees for CGI certification. Fees are payable to IGSPHA.

Renewal Fee

- For each three-year renewal, the fee will be \$300.00.
- Reinstatement fee will be \$350.00.
- No refunds allowed

13. USE OF CGI DESIGNATION

A Certified Geothermal Inspector Professional (CGI) may use the designation with name on organization letterheads, business cards, and all forms of address. Certification is for individuals only. The CGI designation may not be used to imply that an organization or firm is certified.





APPLICATION PART B: APPLICATION WITH PROJECT SUMMARY

TRAINING SITE: _____ **DATE:** _____

The following information is to be filled out as completely as possible. Please read the “Policy Book” very carefully, and also follow instructions for completing and forwarding forms. It is important that the IGSHPA Certification Board have substantiating data for each criteria indicated in the application. Please type or print data except where signature is required.

NOTE: ALL APPLICATIONS MUST BE COMPLETE AND THE EXAMINATION FEE PAID BEFORE EXAM CAN BE SCHEDULED.

Mail application to:

IGSHPA – CGI Certification
1201 S. Innovation Way drive Suite 400
Stillwater – OK – 74074
OR Email a scanned copy to roshan@igshpa.org

File Data (Do not complete)

File Number: _____
Date: _____
Payment Enclosed: \$ _____
Check #: _____

Personal Data (Complete in Full – Please Print or Type)

Address Requested for Correspondence: Business Residence
 Prefix: ____ Last Name: _____ First Name: _____ Middle Initial: ____
 Job Title: _____
 Business Name: _____
 Business Address: _____
 City: _____ State: _____ Zip: _____
 Phone: _____ E-mail: _____
 _____ Residence Address: _____
 _____ City: _____ State: _____ Zip: _____
 Phone: _____ E-mail: _____

DIVISION I – EDUCATION

List in chronological order the name and location of each college or university attended; also list graduate and research work and other appropriate training.

Name & Location of Institution	Years From - To	Date Graduated	Degree Received	Field in Which Degree Was Issued



Please answer the questions in this box.

1. Have you taken the **required** IGSHPA CGI training course? Yes No

2. Do you have a Heat Fusion Card from a pipe manufacturer and/or an equivalent? Yes No

3. Are you the owner of and/or have access to a ground heat exchanger design program? Yes No

DIVISION II – PROFESSIONAL REGISTRATION

2.1 Registration

- A. Certified IGSHPA Professional Yes No
- B. Registered Professional Engineer Yes No
- C. Registered Architect Yes No

2.2 List any other registration

DIVISION III – EXPERIENCE RECORD

Please complete the following in chronological order. Include a description of commercial geothermal heat pump design job functions held for each employment period. The form may be duplicated if additional space is needed.

Date	Employer Name & Address	Concise Statement of Employment Experience Please give Geothermal related job functions
From: _____ To: _____		
Title or Position		



Date	Employer Name & Address	Concise Statement of Employment Experience Please give Geothermal related job functions
From: _____		
To: _____		
Title or Position		
Date	Employer Name & Address	Concise Statement of Employment Experience Please give Geothermal related job functions
From: _____		
To: _____		
Title or Position		
Date	Employer Name & Address	Concise Statement of Employment Experience Please give Geothermal related job functions



From: _____		
To: _____		
Title or Position		

REFERENCES Furnish the names and addresses of at least 2 references whose standing in the field is generally recognized, i.e., an IGSHPA professional or Registered Professional Engineer, etc.

Name	Company	Position	Specify if individual is an IGSHPA professional



OBLIGATION

I _____ (Signature), having completed the above to the best of my ability, do hereby apply for IGSHPA Certified Geothermal Inspector (CGI).

Affidavit

I hereby accept sole responsibility for accumulating and delivering the required supporting documentation as outlined in order to be considered for Certification. IGSHPA, its employees, officers, instructors, staff, proctors, and Certification Board members are hereby held harmless for all acts of commission or omission of any and all kind which may adversely affect me in any way whatsoever, including but not limited to, loss of employment or promotion, inability to obtain a position which requires any of IGSHPA Certifications, dismissal from any position, or any other thing or action which may adversely affect me.

I hereby also agree (a) to be bound by the terms and provisions of IGSHPA, its bylaws and such other regulations as may from time to time be in force, so far as they may affect me; (b) to indemnify and hold harmless each and all of your members, Board of Directors, Certification Board, employees, officers, instructors, examiners, and agents from and against any liability whatsoever in respect to any act or omission by you or them or any of them in connection with this application, the examination, the grades given upon such examination, and/or the granting or issuance of or failure to grant or issue a certificate to me; (c) that any prescribed fee paid by me is not refundable; and (d) that any certificate granted or issued me shall remain property of the Association.

I certify that all information contained in this application is correct to the best of my knowledge.

Print Name

Signature:

Date_____