

Process for Certifying a Home under HBA-DOC's Green Building Initiative Program

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SCOPE

This document describes the process that a Builder will follow in order for a house to be certified under Durham, Orange & Chatham counties' Home Builders Association's (HBA-DOC) Green Building Initiative program.

GETTING STARTED

HBA-DOC's Green Building Initiative (GBI) program is modeled after the National Association of Homebuilder's GBI program using the NAHB Model Green Home Building Guidelines as the foundation for our standards. This set of standards provides details on many sustainable building practices in the areas of lot preparation, resource efficiency, energy efficiency, air quality and home owner education. By meeting these specific "best practice" items, a builder can be awarded points towards achieving a GBI certification from HBA-DOC for a specific house.

It is important to note that the HBA-DOC has tailored the point system for North Carolina's climate and building practices which has been approved by the NAHB. This point system is not reflected in the Green Home Building Guidelines published by the NAHB, but is included on the HBA-DOC's GBI spreadsheet calculator, and is the one a builder should use when tallying points.

This process ideally needs to begin at the planning stage of a new house. It is possible to begin the process mid-construction, but difficult due to the need for verification and proof of many items behind the walls.

It is possible to have a home outside of Durham, Orange & Chatham counties certified, but any additional expenses associated with distance and travel will be the responsibility of the Builder.

There are several other green building programs in the North Carolina area. There are many areas of overlap which might prove it beneficial to the builder to participate in multiple programs for a particular house.

RESOURCES

A copy of the **NAHB Model Green Home Building Guidelines** can be obtained through the NAHB or electronically downloaded off the NAHB website at the following web address (note, this document gives the necessary details to achieve GBI certification, but does not include the modifications for the HBA-DOC program):

http://www.nahb.org/publication_details.aspx?publicationID=1994§ionID=155

Download the **HBA-DOC's GBI Calculator Spreadsheet** (MS Excel format). This document contains all the updated point systems that will be used to calculate a house's GBI score under the HBA-DOC program:

<http://www.hbadoc.com/index.cfm>

Download the **Request for Certification Application Form** for initiating the HBA-DOC GBI certification process:

<http://www.hbadoc.com/index.cfm>

Download the **HBA-DOC GBI Council Application Form** for joining the Green Building Council:

<http://www.hbadoc.com/index.cfm>

Download the **HBA-DOC Member Application Form** for joining the HBA of Durham, Orange & Chatham counties:

<http://www.hbadoc.com/registernewmembers.cfm>

CERTIFICATION PROCESS OVERVIEW

- 1) Builder submits an application package along with application fee.
- 2) A Technical Liaison / Verifier will be assigned to help the Builder with technical questions throughout the process.
- 3) During the course of construction, the Builder documents proof of meeting applicable GBI items through 3rd party testing or other allowed methods as defined in the HBA-DOC GBI Calculator.
- 4) Builder submits complete documentation package for review by Verification subcommittee.
- 5) If follow-up or corrective action is required, Builder will be notified by Verification subcommittee.
- 6) Upon certification, the house will be registered within HBA-DOC's GBI program and a certificate will be awarded.

SUBMITTING AN APPLICATION

To begin the certification process, the builder must first submit in writing an application form along with the application fee. The application form can be either submitted as hardcopy or electronically and the check sent in the mail or delivered, but the certification process will not begin until both are received by the HBA-DOC office.

Note also, that a builder must be a member of the GBI Council and a member of the HBA-DOC in order to initiate certification of a house. If not already a member, the builder can join simultaneously with applying for certification.

Schedule of Fees	
GBI Certification Application (each, non-refundable)	\$150
Sampling Fee (see below)	\$50
Re-inspection (per additional field visit)	\$100
Extra Certificate (one provided with application fee)	\$10
GBI Council Membership (annual)	\$75

Submit application and fee to:

Home Builders Association of Durham, Orange & Chatham Counties
20 W. Colony Place, Suite 180
Durham, NC 27705
Attn: GBI Program Administrator

Tel: 919-493-8899
Fax: 919-490-7963
email: gbi@hbadoc.com

A new application must be filed out for each house to be certified under the HBA-DOC GBI program, unless the house is subject to the volume builder sampling option as shown below.

The HBA-DOC GBI Standards will be reviewed on approximately a 12-month cycle and are subject to change after these reviews and after NAHB approval. The version that the Builder will be held accountable for is the current version at the time of application submission. The version date will be noted in the file for all parties' reference.

Note that the Builder can delay submitting the application form and fee until after the Builder has determined if they will achieve enough points to receive certification. The disadvantage with this approach is that a file will not be open for the house during construction and any technical information conveyed will not be captured in your file.

Submitting an application and fee does not guarantee that a Builder's house will be certified under the HBA-DOC GBI program. The fee is non-refundable. The HBA-DOC reserves the right to revoke a house's certification at any time upon finding evidence that it was falsely presented as meeting any of the objectives.

VOLUME BUILDER SAMPLING PROTOCOL

The HBA-DOC GBI sampling plan follows the Energy Star Sampling Protocol. To be eligible for sampling, the Builder must either:

- a) build a minimum of 20 homes per year; or
- b) build subdivisions and apply the sampling protocol to houses with the same floor plan and same sub-contractors.

Each new floor plan, subdivision, or set of sub-contractors requires an initial Certification and payment of the full application fee.

The Builder then identifies Batches of seven (7) houses that can be randomly picked from by the Verifier for additional verification testing or inspection. The Verifier will evaluate one of these houses. Each of these 7 houses will be subject to the Sampling Fee.

If each verified home passes, then all homes in the Batch pass and will receive certification.

If any home fails to pass verification, then the Builder will be directed to fix the problem and the verifier will inspect 33% or two (2) of the remaining homes in the batch for compliance. If any of these homes fail, then the Builder will be asked to perform a root cause failure analysis and the remaining homes in the batch will be inspected and respective fees assessed.

If the Builder's subdivision has 3 failures within a 3 month period, then the Builder's eligibility to use the Sampling Protocol will be revoked until a 3rd Party Verifier is confident in the Builder's ability to repeatably pass the verification.

CERTIFICATION PACKAGE

The first step in preparing for certification should be for the Builder to review the entire GBI Standards, point system and Guidelines document. Identifying which items the Builder will incorporate into their house up front will help ensure that all the proper documentation is collected.

We recommend filling out the GBI Calculator spreadsheet for your project ahead of time to see what your potential score and certification level could be. This gives you the opportunity to make adjustments in your plans to ensure you maximize your potential. Note that the points for some items can be split up giving the Builder partial credit if only part of the item's objectives were met.

The spreadsheet can also be used as a checklist for the Builder to note when various documentation is completed. Each Guideline item requires some form of proof that it was completed. The spreadsheet indicates what type of documentation is allowed for each item. In some cases, 3rd party test results and in others, a simple digital photograph is sufficient. The intention is to most efficiently communicate compliance with minimal paperwork. The table below summarizes the different categories of documentation.

Doc. Code	Documentation Description
3	Third Party. For these items, a disinterested third party (i.e. not a supplier or subcontractor who is actually providing goods or services for this building) is required to provide certification about the type of material (for example, certain forest products), or presence of certain circumstances (for example, confirming that the project is actually built on an EPA Brownfield site).
S	Subcontractor or Supplier. This can be in the form of an invoice which sufficiently identifies the project (pricing information should be removed from the document, since it will be available to any GB Council member), a PO to a subcontractor or supplier, or a certification form completed and signed by a Subcontractor or Supplier.
B	Builder Signature. Builder is held accountable for passing section and can sign off on spreadsheet. Builder must be prepared to prove compliance to section if requested.
P	Photo. A digital image of the component of the building, or the site, or any aspect of the project that is time dated and sufficiently detailed to allow confirmation that the claimed technique, product or system has been incorporated in the structure for which the certification is being sought, or was used in the development of which the structure is a part. Images should be kept to 100 dpi or less and no larger than 4x6".
I	Illustrations. Includes building plans, site plans, topography, specifications, drawings, or any other graphical document that depicts aspects of the project for which credit is being claimed. PDF format is preferred.
W	Written Information. Text or description of the aspect of the project which justifies the awarding of points. In some cases, the written information may be a note on a site plan, indicating the aspect of the project. In other cases, the written information will need to be a longer piece that provides sufficient information to determine that the Builder actually accomplished the task (such as assembling the project team), or to evaluate an applicant's proposed alternative method of satisfying a requirement. Preferred electronic format is MS Word or PDF.

It is the Builder's responsibility to coordinate and pay for all 3rd party testing necessary to obtain sufficient proof that the objectives of each item were met. The GBI certification application fee does not cover any 3rd party testing.

The certification package can be submitted in a variety of formats. We prefer electronic, but it might be difficult to assemble test results from various vendors electronically. In that case, a binder with tabbed sections and organized results is acceptable. HBA will accept a combination of electronic and paper. Please use the calculator spreadsheet to indicate which format the evidence for each item is being submitted.

Electronic documentation must adhere to the following guidelines:

- 1) All electronic material submitted must be labeled with the project name and reference the paragraph number it supports.
- 2) Acceptable formats are PDF, MS Word, MS Excel, JPEG, or other image format.
- 3) All photo files should be no greater than 100 dpi at 4x6".
- 4) All electronic material should be submitted with original package submission via either e-mail as attachments or burned onto a CD-ROM.

The certification package must be neat, orderly and contain the following items:

Certification Package Must Contain
1) Cover letter from Builder identifying the project name and address, which level you are targeting along with any comments or notes for the Verification Subcommittee.
2) The completely filled out GBI Calculator spreadsheet. If you send in a hard copy, please make sure to print each of the worksheets within the spreadsheet.
3) All supporting documentation including photos and reports organized in the same order as the Guidelines.

Note that the Verifier reviewing your application and package is not responsible for identifying items the Builder failed to give him/herself credit for. They will only verify what the Builder has claimed to have met.

WHERE TO GO FOR ANSWERS

During construction and package assembly, the Builder can go to the following places for additional information.

Where To Go for Answers
1) User Guide of the NAHB Model Green Home Building Guidelines. Part 2 has detailed descriptions of each of the specs and what needs to be done to achieve them.
2) Any referenced website or books within the Guidelines document
3) The Frequently Asked Questions section at the bottom of this document
4) Administrative questions can be answered by the GBI Administrator at HBA-DOC
5) Technical questions should be directed to the Verifier in writing by either fax, e-mail or paper. Depending on the scope of the question, the Builder might be directed to any number of 3 rd party consultants in the area who are familiar with the GBI guidelines.

REVIEW PROCESS

Once the completed certification package is received by the HBA-DOC GBI Program Administrator, it will be submitted to the HBA-DOC GBI Verification Subcommittee for review. There are 5 stages to this review process. The timeframes shown below are suggested maximums, not mandatory.

Review Stage	Activity	Timeframe
Initial Package Review	The Verifier will confirm that all documentation has been submitted that corresponds to the Builder filled-out GBI Calculator spreadsheet. The Verifier will respond to the Builder in writing any discrepancies or if additional data is required.	≤ 2 weeks
Field Visit (optional)	The Verifier will arrange a time with the Builder to visit the house and observe any items that require visual proof to support the provided documentation.	≤ 1 week

Rework Period (optional)	If additional documentation or work is required by the Builder in order to satisfy the specifications, they must do so, and respond back in writing to the Verifier with any supporting documentation.	≤ 2 months
Additional Review & Field Visit (optional)	If the provided documentation is not sufficient to approve the specific item, and the Verifier must return to the field for visual confirmation, then a Re-inspection Fee will be imposed.	≤ 2 weeks
Registration & Certification	Upon successful review and tallying of points, the house will be registered within HBA-DOC's GBI's database and will be awarded a GBI certificate.	≤ 1 week

Should the Builder have any concerns with the Verifier's review and requests, the Builder should discuss these concerns with the Verifier. If the Builder is still not satisfied, he/she may request a subcommittee level review of their concern. A panel of at least 3 Verification Sub-committee members will review the concern and make final recommendations.

FREQUENTLY ASKED QUESTIONS

Will the GBI Specifications ever change?

It is the intention of HBA-DOC's GBI Council to review and release updated GBI Specifications on an annual basis to allow inclusion of suggested changes or state-of-the-art sustainable building practices.

How do I submit a suggested change or addition to the GBI specification?

We greatly appreciate and encourage everyone's help in improving and keeping the standard up to date. To submit a suggestion, please do so in writing by mail, fax, or e-mail to the HBA-DOC office, attention "GBI Standards Suggestion". Provide your name and contact information so we may contact you if we have any questions during our annual review.

Home Builders Association of Durham, Orange & Chatham Counties
 20 W. Colony Place, Suite 180
 Durham, NC 27705
 Attn: GBI Standards Suggestion
 Fax: 919-490-7963
 e-mail: gbi@hbadoc.com

Is there a GBI program for Remodelers?

Many of the initiatives covered within the Green Building Guidelines can be utilized by Builders working on remodel projects and renovations to improve the sustainability and energy efficiency of their project. Currently, the HBA-DOC does not have a certification program in place; however, we are looking into the possibility of creating a program tailored for remodelers.

Are there any marketing tools I can use?

Yes. Once a Builder's house has been applied for and registered, the Builder shall have access to GBI logos for inclusion in the Builder's marketing material. During construction, the builder may install a temporary sign in front of the house indicating participation in the GBI program and use logos in marketing material. Upon certification of a house, a certificate will be provided along with a "GBI certified" decal for placement on the new house. If additional certificates are needed, they may be purchased from the HBA-DOC office for \$10/ea. Note that use of the marketing materials for any other house other than those that have been certified or in any vague cases inferring that all a Builder's homes are GBI certified will result in revocation of certification.