

Sustainable Building & Design Book & tool list

CORE TEXTS

The following books will be used as core texts for the program, and should be owned by each student. Ideally, you will be familiar with the content of the books prior to the beginning of the program.

Essential Sustainable Home Design, by Chris Magwood, New Society Publishers, ISBN 978-0-86571-850-0, \$39.99 This book was written based on the curriculum to the SNC program, so is a purpose-made textbook for the program. It gives a comprehensive overview of sustainable building options using a goals-based approach.

Essential Building Science, by Jacob Deva Racusin, New Society Publishers, ISBN 978-0-86571-834-0, \$34.95 Building science is at the core of understanding how to design and build for durability, health and performance, and this is a great guide to the basic principles.

Visual Handbook of Building and Remodeling, 4th Edition, by Charlie Wing, Taunton Press, ISBN 978-1631868795, \$39.95

How Your House Works: A Visual Guide to Understanding and Maintaining Your Home, by Charlie Wing, RS Means, ISBN 1118099400, \$27.95 This is an excellent resource for all aspects of construction, especially mechanical systems. Includes lots of details, easy illustrations and all the charts and diagrams you'll ever need. ***Be sure you get the updated 2012 version of this book!



Recommended Reading: These books are not required for the classroom portions of the program, but are excellent references to own and review.

The Natural Building Companion, by Jacob Deva Racusin and Ace McArleton, Chelsea Green Publishers, ISBN1-60358-339-8, \$59.95

Green from the Ground Up, by David Johnston & Scott Gibson, Taunton Press, ISBN 1-56158-973-9, \$29.95 This book covers conventional homebuilding in a very green way. It's a good grounding in thinking about the house as a system.

It may also be beneficial for those who intend to work in Ontario to buy a copy of the Ontario Building Code (OBC). There are a couple of versions available that contain only Part 9 (for houses and small buildings), which are handy references for builders to own, such as https://www.orderline.com/housing-and-small-buildings.

The Endeavour library holds a great collection of sustainable building books and resources, available for borrowing throughout the course. We will take requests to add additional resources from course participants throughout the program.

TOOLS

Endeavour provides an extensive complement of major construction tools available to all students in the program. However, the tools that normally fill a builder's tool belt on a daily basis must be your own.

The following is a list of tools that **must be owned** by each student prior to the outset



of the building phase of the course. We will hold a "tool day" during the first week of the program to ensure that each student is properly equipped, and to study tool use, safety and maintenance. Be sure to mark your tools in such a way that you can easily identify them.

While this list does not specify particular brands of tools, it does give some selection advice. In general, it is best to look at tools priced in the mid-range. The cheapest tools typically do not hold up to continuous job-site use, and the most expensive are typically overkill for the work you will be doing. As a general rule, mid-priced tools with high-quality blades, bits and attachments are the best combination. The price guide here was created using the Canadian Tire catalogue to establish a low-end and high-end for the various options. If you go to the low end for everything, the cost is \$430. The high end takes you to \$800.

We can organize a tool buying expedition once the program has started if you would like our assistance in making your tool choices. Or if you have any questions before buying feel free to give us a shout!

Personal Gear Required

- CSA approved safety footwear (must have visible CSA green logo)
- CSA approved Hard Hat (any colour except white) \$15-40
- Safety glasses neck-string is recommended \$10
- Ear protection (if using ear plugs, multiple replacements required) \$10
- Gloves (1 pair durable, 1 pair waterproof) \$25
- Sun screen
- Adequate work clothing for cold and hot conditions
- Tool belt make sure this is comfortable and fits your tools (including a drill holster/pouch/hook), and consider suspenders or tool vest \$20-50
- Respirator cartridge style (not paper dust masks)
 \$20-50



General Tools Required

These are the tools that will see continuous personal use throughout the course. You will be responsible for having daily access to these tools.

- Portable tool box (buy this last, and make sure it fits everything you want to have on site with you. You may want it to be lockable) 50-200
- Cordless impact driver, 18v with 2 batteries and quick-charger (you can usually buy a drill/impact set, but if only buying one, choose the impact driver) \$150-250
- Good selection of drill bits (incl. minimum of 6 #2 robertson bits in various lengths, high-speed (metal) bits, wood bits and optional spade bits in a variety of diameters) \$varies greatly, look for sets
- Tape measure, minimum 25' x 3/4" (don't get metric tape)\$10-20
- Speed square \$15-20
- Bevel square \$5-10
- Torpedo level \$15-20 Screwdriver set (a multi-bit driver or a set of screwdrivers) \$10-60
- Framing hammer (not a hollow shaft) \$25-50
- Nail puller/Cat's paw \$20
- Needle nose pliers \$5-20
- Chalk line \$10-15
- 2 Utility knives w/replacement blades (you will lose or break one!)
 \$10-20
- 3 carpenter's pencils \$5-10
- 3 permanent "sharpie" markers \$5
- Site notebook or clipboard \$10-20



*Please note that it's worth keeping about \$100 on reserve for tools that need replacing during the program, or to buy specialty tools that might be needed/desired for particular phases of the project.

OPTIONAL TOOLS

There are some tools that are typical in a builder's toolbox but that we aren't requiring in order to keep costs down. But if you have or can afford the following, these will be useful to bring:

- Circular saw (corded or cordless) with carbide tipped blade \$100-300
- Framing square \$10-15
- Four foot level \$30-60
- Set of 2-4 squeeze clamps \$30-80
- Paint brushes \$5-10
- 14 inch pool trowel \$40
- 14 inch square trowel \$35
- Staple gun or hammer tacker \$20-60
- Tin snips (a center-cut is best if you only get one) \$10-15
- Set of Chisels (min. 1", 3/4", 1/2") \$15-40
- Pliers & needle nose pliers & side cutters & channel locks & vice grips & adjustable wrench \$50-70 set
- Socket set \$25-50
- Reciprocating saw (corded or cordless)