

**EXECUTIVE SUMMARY
OF THE
RECOMMENDED NATIONAL EDUCATION BENCHMARK FOR
NEW HOME BUILDERS AND RENOVATORS AND
ASSESSMENT OF PROVINCIAL COURSES AGAINST
THE RECOMMENDED BENCHMARK**

Prepared for
Canadian Home Builders' Association

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EXECUTIVE SUMMARY

In March 2005, the Board of Directors of the Canadian Home Builders' Association (CHBA) approved a motion to prepare a residential industry accreditation benchmark within 12 months. CHBA subsequently engaged a consultant to carry out the project.

The project has two objectives:

1. To recommend a national education benchmark for new home builders and renovators.
2. To assess provincial programs against the recommended national benchmark for new home builders and renovators.

The results of the work are summarized below. Details are documented in the body of the report.

Overview of Recommendations about a National Education Benchmark for New Home Builders and Renovators

The recommended benchmarks for new home builders and renovators are similar. The summary lists the benchmark for new home builders and highlights differences in the benchmark for renovators.

Benchmark for Coverage of Business Planning and Management

1. Overview of a business plan: The overview should mention the main elements of a business plan:
 - a) Vision, objectives and goals; rationale for business; purpose of the business plan.
 - b) Financial plan.
 - c) Marketing plan.
 - d) Operating plan.
 - e) Human resource plan.
2. Vision, objectives and goals:
 - a) Statement of vision, objectives and goals, and also the following inclusions:
 - b) Statement of company rationale, values, directions and risks.
 - c) Statement of ethics.
 - d) Products and services.
3. Financial plan (overview):
 - a) Purposes of financial plans.
 - b) Pro-forma statement of operations (income statement).
 - c) Pro-forma statement of financial position (balance sheet).
 - d) Cash flow estimates.
 - e) Mark-ups.
4. Marketing plan (overview):
 - a) Explanation of terms: market research, marketing, marketing planning.
 - b) Market research methods.
 - c) Elements of marketing planning: market environment, target market, positioning, pricing strategy, sales strategy (public relations plan, advertising plan and referrals plan).
5. Operating plan:
 - a) Size and form of business (organization).
 - b) Implementation of major functions: land acquisition, house designs, estimating, contract administration, quality control, customer service and waste management.

The benchmark for renovation should exclude land acquisition and house design tasks

- c) Reference to management control systems (general, construction management, site management).
- d) Monitoring and evaluation of objectives and operating plan (business goal assessment, and performance against objectives using sales and financial measures).
- e) Protecting the business: overview of insurance and Builders' Lien Act.
- f) Development of a new/updated plan.
- g) Managing change: changes to one part of the business plan affect other parts.
- h) Importance of communications to business success; guidelines for effective communication.

These elements of the business plan should be illustrated, as in the course, Business Planning, offered by MHBA and AHRSC.

Benchmark for Coverage of Human Resource Planning and Management

1. Identification of job functions and tasks required.
2. Identification of competencies required and development of job descriptions.
3. Alternate approaches to meeting human resource requirements: sub-contracting, staffing.
4. Skills assessment and recruiting procedures.
5. Training/skills upgrading.
6. Legislation governing employees.
7. Salary and benefits.
8. Performance evaluation.
9. Career paths.
10. Leadership.
11. Motivation.
12. Delegation.
13. Development of productivity benchmarks.
14. Development of feedback procedures.
15. Methods for dealing with poor performers and effective firing procedures.

Benchmark for Coverage of Marketing and Sales

1. Marketing:
 - a) Overview of marketing, i.e., explanation, benefits.
 - b) Marketing budgets/budgeting: scope, guidelines for budgeting.
2. Market planning and implementation:
 - a) Market research: explanation, methods.
 - b) Market assessment.
 - c) Target market identification.
 - d) Product development.

The benchmark for renovation should exclude the product development task.

- e) Product pricing.

The benchmark for renovation should exclude the product pricing task.

- f) Product positioning, competitive analysis.

The benchmark for renovation should exclude the product positioning task.

3. Promotion:
 - a) Overview: explanation of promotional activities, range of options.
 - b) Key elements of a promotional plan, e.g.: developing messages, communications guidelines, development of corporate identity.
 - c) Advertising: overview, review of alternate forms of advertising.
 - d) Public relations.

4. Sales:
 - a) Personal selling practices.
 - b) Sales recruitment.
 - c) Sales training.
 - d) Place of sales.

The benchmark for renovation should exclude the task focusing on place of sales/sales centre.

- e) Sales tools
- f) Developing referrals.

5. Client relations:
 - a) Explanations to clients, e.g.: about features of their houses, client accountability.
 - b) Services up to occupancy.
 - c) After sales services program.

The benchmark for renovation should add details about client relations in the renovation process.

6. Monitoring and evaluation of marketing activities: surveys of customer satisfaction.

Benchmark for Coverage of Financial Planning and Management

1. Financial planning:
 - a) Explanation of a financial plan:
 - i. Main elements of the business plan, etc.
 - ii. Purposes of the business plan
 - iii. Financial projections
 - b) Pro-forma statement of operations (budget):
 - i. Explanation/elements (sales, costs, gross income, net income, etc.)
 - ii. Purposes of the pro-forma statement of operations
 - c) Pricing: alternate methods, factors to consider
 - d) Break-even analysis: explanation
 - e) Discussion of overhead costs
 - f) Margin/mark-up: explanation and guidelines
 - g) Pro-forma statement of financial position: explanation, elements
 - h) Pro-forma cash flow statement
2. Financial management:
 - a) Explanation of financial management practices: records requirements and operating guidelines, e.g., timely reporting, communicating guidelines.
 - b) Accounting concepts, principles and practices:
 - i. Accounting cycle
 - ii. Alternate accounting benchmarks
 - iii. Accrual accounting
 - iv. Accounts receivable
 - v. Accounts payable

- c) Bookkeeping: explanation; concepts and practices: journal entries, double-entry, preparation of ledgers, trial balance, etc.
- d) Financial statements:
 - i. Statement of operations: explanation, elements (sales, costs (fixed, variable), gross income, net income).
 - ii. Statement of financial position: explanation; elements (assets, liabilities, shareholders' equity).
 - iii. Cash flow statement: timing of costs and income, guidelines.
 - iv. Analysis of variances (between forecasts and actual results).
- e) Financial performance measures: financial ratios, benchmarking.
- f) Financing: types of construction financing.
- g) Lender policies; working with lenders.
- h) Credit arrangements.
- i) Loan and collateral security requirements and arrangements.
- j) Cost control (general and specific, i.e., overhead, construction, sales, administration costs).
- k) Purchase order system.
- l) System to control/account for extras and changes.

Benchmark for Coverage of Project Management and Supervision

1. Project planning:
 - a) Meeting human resource requirements through staff and subcontractors: advantages and disadvantages of each approach; need for job descriptions.
 - b) Development regulations: zoning, permits, easements.
 - c) Contracts with sub-contractors, suppliers, insurers and lenders: subcontractor and supplier responsibilities; requirements of insurers and lenders.
 - d) Tendering: bid requirements and practices; trade selection.
 - e) Scheduling: value of scheduling; scheduling guidelines; critical scheduling stages; time management.
 - f) Pre-construction meetings.
2. Project supervision:
 - a) Material and labour acquisition: purchasing order system and guidelines; substitutions; timing; storage and care.
 - b) Construction processes: site logistics; site servicing; contingency plans (e.g., bad weather).
 - c) Contract compliance; plan and specification check (drawings, etc.).
 - d) Inspections: critical inspections; inspection guidelines.
 - e) Quality control: performance benchmarks, associated requirements.
 - f) Reporting requirements.
 - g) Cost control: comparison of costs with budget.
 - h) Change/work order system.
3. Site/work safety:
 - a) Guidelines on safe site conditions.
 - b) Guidelines from Occupational Health and Safety (OH&S) legislation/regulations.
 - c) Guidelines from WHMIS regulations.
 - d) Guidelines from WCB regulations.
4. Client relations:
 - a) Understanding customer satisfaction.
 - b) Communication requirements, e.g., material selection schedule.
 - c) Dealing with customer expectations.
 - d) Company policies re: customer expectations.

Benchmark for Coverage of Legal Issues in Housing

1. Legal requirements of contracts: This includes necessary elements, requirements and conditions of contracts, basis for and patterns of payment, breach of contract and remedies for breach of contract.
2. Types of contracts: This includes types of building contracts, contracts with sub-contractors, with warranty providers (this should include express and implied warranties, coverage, and breach of conditions), with lending institutions and with realtors.
3. Land registry system and related topics: This includes an explanation of the Torrens System, land conveyancing and closing procedures and conditions; easements.

The benchmark for renovation should exclude the task about the land registry system and related issues, i.e., explanation of the Torrens System, land conveyancing and closing procedures and conditions; easements.
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4. Builder liability: This includes liability in contract and liability in negligence, tort law, environmental liability, WCB/OH&S liability, statute of limitations.
5. Builders' Lien Act: This includes an explanation of the Act and of the following topics: lien claimants, filing procedures, amounts, holdbacks and enforcement of liens.
6. Insurance law: This includes information on coverage by insurance companies.
7. Privacy law and corresponding requirements, e.g., penalties for breach.
8. Dispute resolution mechanisms: This includes information on mediation and arbitration.
9. Employment law: This includes information on conditions of an employment relationship, termination of employees, constructive dismissal, sexual harassment, vicarious liability and individual rights under the Individual Protection Act.

Benchmark for Coverage of Building Codes

1. Background information on the Building Code, i.e., its purpose, structure, the code development process, legal authority for adopting and implementing building codes, administration of the Code and basic information of other codes (Fire Code and Plumbing Code) and its relation to the Building Code.
2. Overview information on the contents of Part 9 of the Building Code, i.e., each section: 9.1 to 9.35 (or whatever new sections are proposed in the new provincial codes), and guidelines on how to find specific information.
3. Information on the new building code, with emphasis on technical changes and objective-based codes, when the new provincial/territorial codes are published.

Benchmark for Coverage of Construction Technology

1. "House-as-a-system" concept.
2. Building science that affects building durability and occupant comfort, including the following:
 - a. Controlling heat flow (heat flow mechanisms are explained).
 - b. Controlling moisture flow (moisture movement mechanisms are explained).
3. Indoor air quality: contributors and detractors (pollutants, moisture, mold, etc.), material selection.
4. Sustainable development: energy efficiency, resource efficiency, environmental responsibility
5. Building envelope details that focus on the following:
 - a. Air barriers (materials and details).
 - b. Vapour barriers (materials and details).
 - c. Foundation design: types of foundations, heat loss control, and moisture control.

- d. Floors: details for heat flow control, moisture management, details at critical locations, vibration telegraphing sub-floors.
 - e. Wall design: heat loss and moisture control; alternate details.
 - f. Roof construction and attics: air leakage into attics, details at critical locations; heat loss control, details to deal with specific problems, e.g., truss uplift, ice damming.
 - g. Windows and doors: installation guidelines to control heat loss and gains and moisture.
6. Mechanical systems:
 - a. Heating, cooling and ventilation principles.
 - b. Heating systems.
 - c. Heat distribution systems.
 - d. Ventilation systems: benchmarks, alternate systems, design and installation considerations.
 7. Integrated mechanical systems.
 8. Engineered building components: This refers to products such as trusses, wood-I's and insulated concrete forms and load-bearing steel studs, and the focus of educational materials is on their correct use.
 9. Construction performance guidelines: In the future, when more warranty providers have produced construction performance guidelines, the benchmark should include an awareness of applicable construction performance guidelines, i.e., an awareness of the purpose and scope of the guidelines, and how to use them. This requirement will not be applied until the guidelines are available and have been accepted by the provincial certifying home builder association or related authority.

Benchmark for Coverage of Safe Work Practices

The recommended course is Leadership for Safety Excellence.

Benchmark for Coverage of Customer Service

1. Explaining service excellence: This includes showing a spirit of service, e.g., credible, attractive, reliable, empathetic and responsive.
2. Customers' perceptions of values, their behaviour and their expectations, e.g., reliability, assurance, tangibles, empathy and responsiveness.
3. Framework for customer service:
 - a) Establishing expectations and an appropriate atmosphere.
 - b) Steps in processing the sale.
 - c) Services during construction
 - d) Conducting pre-settlement inspections and customer orientation.
 - e) Handling after-occupancy warranty service work.
4. Handling difficult situations: Identification of common difficulties, methods for resolving conflicts.
5. Quality customer service action plan:
 - a) Attributes of an effective strategy.
 - b) Procedures for identifying customer service problems and solutions.

Benchmark for Coverage of Communications

1. Course objectives: To increase awareness of one's communication patterns in negotiation and offer guidelines on listening and speaking in negotiations.
2. Communication: Methods of communication, communication barriers and possible effects, destructive communication.

3. Listening in negotiation: Active listening, general characteristics of non-verbal communication, attending skills (i.e., skills that encourage listening), facilitating skills (i.e., skills to encourage others to speak), reflective listening.
4. Speaking in negotiation: Passive/assertive/aggressive communication, principles of assertiveness, components of assertive behaviour, assertive expression and steps in assertive communication.
5. Shifting from positions to interests: Moving from positions to interests, win/lose and win/win conflict resolution, exploration of interests and issues, how to identify interests, ways to determine interests, “if they won’t move from their position”, open and closed questions, probing, facing the challenges of self-disclosure, reframing.
6. Negotiation: Different styles of conflict, hard/soft bargaining choices, negotiating styles, ways of discussing a problem, negotiating models, speaking skills in negotiation, handling resistance to interest-based negotiation.

Assessment of Provincial Courses Offered by Provincial Housing Associations or Related Organizations against the Recommended Benchmark

Previous sections have also assessed the compliance of existing courses offered by provincial home builder associations or related organizations with the recommended national education benchmark.

The following table lists the topics that comprise the recommended benchmark and indicates the compliance of provincial home builder association or related organization courses with it in general terms. Details of the courses reviewed and the assessments are contained in the individual sections of the report.

The symbols used and their meaning in the table are as follows:

1. “Comp” refers to compliance.
2. “Y” indicates that the course complies with the recommended benchmark.
3. “N” indicates that the course does not comply with the recommended benchmark because it does not discuss the topic at all or only partially or no course is offered.
4. “NA” indicates that the course is not applicable to the proposed benchmark.

Recommended Topics in a National Education Benchmark for New Home Builders and Renovators	Jurisdiction					
	CHBA-BC		PHBIA		SHBA	
	Course	Comp	Course	Comp	Course	Comp
Business planning and management	No course	N	Business Principles for the Business of Home Building	N	Business Management	Y
Human resource planning and management	No course	N	Business Principles for the Business of Home Building	N	Business Management	Y
Marketing and sales	Sales and Marketing Sales and Marketing for Renovators	Y N	New Home Marketing	Y	Sales and Marketing Management and New Home Sales (coverage of two courses considered together)	Y
Financial planning and management	Financial Management	N	Finance and Accounting	Y	Finance and Banking	Y
Project management and supervision	Project Management	Y	Construction Administration Construction Supervision	Y N	Project Management	Y
Legal issues in residential construction	Construction Law	Y	Basic Business Law	Y	No course	N
Building codes	Introduction to the BC Building Code	N	Building Codes and Benchmarks	Y	Code Construction	N

Recommended Topics in a National Education Benchmark for New Home Builders and Renovators	Jurisdiction					
	CHBA-BC		PHBIA		SHBA	
	Course	Comp	Course	Comp	Course	Comp
Construction technology	<u>Moisture Control</u> Building Envelope Solutions Theory and Practice (BEST Practice) <u>Construction Technology</u> Building Technologies for the New Millennium	NA Y	<u>Moisture Control</u> Moisture Control Technician <u>Construction Technology</u> Building Solutions Construction Fundamentals	NA N N	No course	N
Safe work practices	No course	N	No course	N	No course	N
Customer service	No course	N	Service Excellence	Y	No course	N
Communications	No course	N	Communication and Negotiation for the Home Builder	N	No course	N

Recommended Topics in a National Education Benchmark for New Home Builders and Renovators	Jurisdiction			
	MHBA	AHRSC		
	Course	Comp	Course	Comp
Business planning and management	Business Planning	Y	Business Planning	Y
Human resource planning and management	Business Planning	N	Business Planning	N
Marketing and sales	Marketing and Sales	Y	Marketing and Sales	Y
Financial planning and management	Financial Management and Banking and Borrowing (coverage of two courses considered together)	Y	Financial Management and Banking and Borrowing (coverage of two courses considered together)	Y
Project management and supervision	Managing Construction	N	Managing Construction Site Supervision	N N
Legal issues in residential construction	Land and Legal	N	Land and Legal	N
Building codes	No course	N	National Building Code – Part 9	Y
Construction technology	Managing Design	N	Better-Built House Managing Design Builder Series Workshop Energy Efficiency Retrofits	Y N N Y
Safe work practices	Leadership for Safety Excellence (required for individuals in the large company category)	Y	Leadership for Safety Excellence	Y
Customer service	No course	N	No course	N
Communications	No course	N	No course	N

The following additional conclusions and recommendations are noted as they apply to recommended topic areas:

1. **Business planning/management:** Although the business planning courses offered by MHBA, AHRSC and SHBA provide information sufficient to be deemed to meet the recommended national education benchmark for business planning and management, each course should be upgraded to include material on specified topics to better meet the recommended benchmark.
2. **Human resources planning/management:** Although the business planning course offered by and SHBA provides information sufficient to be deemed to meet the recommended national education benchmark for human resource planning and management, this course should be upgraded to include material on specified topics to better meet the recommended benchmark.
3. **Marketing and sales:**
 - a) Although the coverage of CHBA-BC’s Sales and Marketing course, PHBIA’s New Home Marketing course, SHBA’s Sales and Marketing Management course and its New Home Sales course (considered together), and MHBA’s and AHRSC’s Marketing and Sales course provide information sufficient to be deemed to meet the recommended national education

- benchmark for marketing and sales, each course should be upgraded to include material on specified topics to better meet the recommended benchmark.
- b) PHBIA's New Home Marketing course provides extensive and more information than other courses on a number of specified topics about marketing and sales.
 - c) PHBIA's optional Sales Management, Professional Selling 1 and Professional Selling 2 courses are not regarded as essential to meet the requirements of the recommended national benchmark for marketing and sales. They contain useful information that can be regarded as beyond the requirements of the recommended national education benchmark for marketing and sales.
4. **Financial planning and management:** Although the coverage of PHBIA's Finance and Accounting course, SHBA's Finance and Banking Course, and MHBA's and AHBRSC's Financial Management and Banking and Borrowing Courses (considered together) provide information sufficient to be deemed to meet the recommended national education benchmark for financial planning and management, each course should be upgraded to include material in specified topics to better meet the recommended benchmark.
5. **Project management and supervision:**
- a) Although the coverage of CHBA-BC's Project Management course, PHBIA's Construction Administration course, SHBA's Project Management course to provide information sufficient to be deemed to meet the recommended national education benchmark for project management, each course should be upgraded to include material on specified topics to better meet the recommended benchmark.
 - b) PHBIA's Construction Supervision course and AHBRSC's Site Supervision course can be regarded as courses that provide information supplementary to the recommended national education benchmark.
6. **Legal issues in housing:**
- a) Although the coverage of CHBA-BC's Construction Law course and PHBIA's Basic Business Law course provide information sufficient to be deemed to meet the recommended national education benchmark for legal issues in residential construction, each course should be upgraded to include material on specified topics to better meet the recommended benchmark.
 - b) Both CHBA-BC's Construction Law course and PHBIA's Basic Business Law course provide information on legal topics in addition to those recommended as part of the benchmark. In the case of CHBA-BC's course, some of that information is specific to BC, such as information about the Homeowner Protection Act. In the case of PHBIA's course, the additional topics discussed are numerous, including forms of business, estate planning, legal issues in finance and banking, bankruptcy and insolvency, condominiums, employment law, intellectual property, personal property, commercial leasing and litigation processes. A decision on the inclusion of such material rests with each association.
7. **Building Codes:**
- a) The recommendation to include information on objective-based codes applies to future revisions of code courses, since that information is not yet available.
 - b) Each of the building code courses is very different from the other. Although PHBIA's Building Code and Benchmark course and AHBRSC's National Building Code – Part 9 course provide information sufficient to be deemed to meet the recommended national education benchmark on building codes, all code courses should be modified to meet the content of the recommended benchmark.
8. **Construction technology:** Two courses meet the recommended benchmark on construction technology: CHBA-BC's course, Building Technologies for the New Millennium and Better-Built House. As noted in the detailed comments, the other courses do not. The two courses on moisture management, BEST Practice and Moisture Control Technician, are both credible courses, but the

recommendation is to offer a course that is broader in scope that includes some information on moisture management.

9. **Safe work practices:** NSHBA and MHBA require the recommended course. Based on the recommended benchmark, CHBA-BC, PHBIA and SHBA should require this course also. This should not be a hardship since most associations are promoting Certificates of Recognition (CORs) in general and this course in particular.
10. **Customer service:** PHBIA is currently the only housing organization that offers a course the focuses entirely on customer service. In view of the growing importance of this topic, the recommendation is for other associations to offer a course on this topic as well.
11. **Communications:** While many courses and the NOA refer to communications, PHBIA is currently the only housing organization that offers a course on the topic. In view of the growing importance of this topic, the recommendation is for other associations to offer a course on this topic as well.
12. **Review of remaining courses:** The following topics of existing courses are not included in the recommended national education benchmark for new home builders and renovators at this time:
 - a) Estimating.
 - b) Blueprint reading.
 - c) Land development.
13. The **National Renovator's Business Course** contains information related to many parts of the recommended national benchmark but does not meet the requirements of the entire recommended national benchmark for renovators.

Recommendation to Facilitate the Development of a National Education Benchmark for New Home Builders and Renovators

One of the attributes of the courses reviewed in this project is the diversity among the courses, even within the same topic areas. They differ in the definition and coverage of the same topics, in the depth of material presented, in the organization of the material and in the teaching approach. The recommendation to respond to this in the interests of developing a more uniform national education benchmark for new home builders and renovators is to develop a series of model courses that would be available for adoption by provincial home builder associations. This recommendation is based on the successful approach in code development and adoption in Canada: a national model code is developed on a consensus basis with input from interested parties, and is then available for adoption in whole or in part by provinces and territories. This approach could save provincial housing associations money in developing and updating courses.