



# Residential Construction Certified™

## Table of Contents

### Course Introduction

Welcome to Residential Construction Certified™ ..... 1

### Architectural Drawings

Creating Architectural Drawings ..... 2-5  
 Dimensions and Scales ..... 6  
 Material & Plan Symbols ..... 7  
 Building Section ..... 8  
 Floor Plan ..... 9

### Building Site Design

Site Design and Evaluation ..... 10  
 Topographical Plan ..... 11  
 Site Development Plan ..... 12  
 Site Evaluation Checklist ..... 13

### Construction Scheduling

Dynamics of Scheduling ..... 14  
 Construction Scheduling Flow Chart ..... 15  
 Construction Scheduling Worksheet ..... 16  
 Permits and Approvals ..... 17

### Foundation Systems

Foundation Types & Considerations ..... 18  
 Standard Gravel Backfill ..... 19  
 Full Gravel Backfill ..... 20  
 Gravity Drainage ..... 21  
 Sump Pump Drainage ..... 22  
 Crawlspace Foundation Details ..... 23  
 Slab Foundation Details ..... 25  
 Piers & Piling Details ..... 28  
 Permanent Wood Foundation ..... 30

### Framing

Structure and Terminology ..... 31  
 Structural Loads ..... 32  
 Panel Materials ..... 33

Alternative Structural Materials .....	34
Earthquake & Wind Resistance .....	35
Double Layer Floor Construction .....	36
Single Layer Floor Construction .....	37
Single Layer Wooden I-Joist .....	38
Double Layer Wooden I-Joist .....	39
Roof Types .....	40
Roof Pitches .....	41
Truss Construction .....	42
Roof Sheathing .....	44
Stair Construction .....	45
Pressure Treated Lumber .....	46
Manufactured Housing .....	47
<u>Concrete</u>	
Concrete Materials & Quality .....	48
<u>Roofing &amp; Siding</u>	
Roof Terminology .....	49
Roofing & Siding Materials .....	50
Horizontally Applied Siding .....	51
Wood Shingles and Shakes .....	52
Cement Stucco .....	53
Synthetic Stucco .....	54
Brick Veneer .....	55
<u>Doors &amp; Windows</u>	
Door & Window Symbols .....	56
Door & Window Components .....	57
Door Construction .....	58
Window Construction .....	59
Window Styles .....	60-65
<u>Fireplaces</u>	
Masonry Fireplace Construction .....	66
Factory Built Fireplaces .....	67
<u>Mechanicals</u>	
Electrical Symbols .....	68
Heating & Cooling Systems .....	69
HVAC System Layout .....	70
Plumbing Symbols .....	71
Plumbing Systems .....	72
<u>Energy Efficiency</u>	
Energy Efficient Construction .....	73

Insulation Materials .....	74
Roof Ventilation .....	75
Green Building .....	76
<u>Interior Finishing</u>	
Interior Wall Surfaces .....	77
Cabinetry .....	78
Countertops .....	79
Flooring .....	80
Moldings and Trims.....	81
Paint Types & Quality .....	82
Stains & Finishes .....	83
<u>Inspections &amp; Occupancy</u>	
Inspections .....	83
Final Considerations .....	84
<u>Association Directory</u> .....	85-87