

Index

- Addenda 69
AGC Document No. 621 (see
*Subcontractor's statement of
qualifications*)
Alberici corporation 73
Alberici corporate headquarters
project 73
ANSI/ISO/ASQ Q9000 194
Associated General Contractors of
America 9
ASTM standard E2114-06a 2
Austin commercial 55
- Bay Area Air Quality Management
District Regulation 8 Rule
No. 5 146
Beck group 125
Best-value contractor selection 43
Building performance 196
Bloomington central station project
30
Bonding requirements 73
Brundtland report 2
Building commissioning 189
purpose and objectives 189
- commissioning defined 190
commissioning requirements 199
extent and timing 199
owner commissioning benefits
190
Building commissioning authority
(see *Commissioning authority*)
Building commissioning process
206
building commissioning 208
equipment commissioning 206
integrated systems commissioning
207
system commissioning 207
subsystem commissioning 206
Building product life cycle 131
building product disposition 135
building product installation 134
building product removal 135
building product use 135
converted material transport 134
material recovery 137
product manufacture 134
product transport 134
raw material conversion 134

- Building product life cycle
 - (continued)
 - raw material
 - extraction/harvesting 131
 - raw material transport 133
 - recovered material transport 137
 - refurbished product transport 137
 - salvaged product refurbishment 136
 - salvaged product transport 136
 - waste landfilled/incinerated 137
- Building Research Establishment
 - Environmental Assessment Method (see *BREEAM*)
 - BREEAM* 24, 30
- Carpet and rug institute's green label and green label plus 146
- CASBEE 30
- City of Dunedin Community Center Project 159
- Control system checkout and testing 217
- Commissioning activities 214
 - commissioning and closeout submittals 214
 - control system checkout and testing 217
 - functional testing 218
 - operational training 219
 - prefunctional equipment testing 214
 - testing adjusting, and balancing 217
- Commissioning authority 208
 - contractor as commissioning authority 210
 - commissioning authority
 - qualifications 210
 - commissioning authority's role 208
 - working with an outside
 - commissioning authority 221
- Commissioning and closeout submittals 214, 224, 226
- Commissioning file 225
- Commissioning plan 86, 212, 224
- Commissioning team 212
- Comprehensive Assessment System for Building Environmental Efficiency (see *CASBEE*)
- Concord hospital project 228
- Conflicting specifications 47
- Construction boundaries 172
- Construction manager at risk 36, 38
- Construction process 163
- Construction site layout and use 171
- Construction Specifications Institute (see *CSI*)
- Construction contracts for green projects 59
 - contract purpose 60
 - contract risk 60
 - contract risk management 61
 - design-build requirements 70
 - order of contract document precedence 72
 - owner-contractor agreement 64
- Construction equipment selection and operation 179
- Contract conditions 65
 - general conditions 65
 - special conditions 67
 - supplemental conditions 65

- Contract documents 64
 - addenda 69
 - conditions of contract 65
 - design-build 70
 - drawings 54, 68
 - other listed documents 69
 - owner-contractor agreement 64
 - specifications 44, 68
- Contractor selection methods 42
 - best-value selection 43
 - price-based selection 42
 - qualifications-based selection 43
- Construction waste management (see *Waste management*)
- Control system checkout and testing 217
- Creative Contractors, Inc. 159
- CSI 48
- CSI MasterFormat™ (see *MasterFormat™*)

- Descriptive specification 45
- Designer defined 77
- Design-bid-build 36, 37
- Design build 36, 39, 70, 78
 - beware of hidden green criteria and conflicts 86
 - design-build agreement 70
 - design-builder defined 78
 - design-build: contractor & designer relationship 79
 - establishing measurable green criteria 85
 - importance of measurable green criteria 83
 - one-stage design-build process 40
 - owner needs and expectations 81
 - owner's project criteria 82
 - owner's project criteria as a contract document 83
 - two-stage design-build process 40
 - selecting a designer 87
- Design-builder defined 78
- Design contracts for design-build projects 91
 - alignment between agreements 93
 - design contract format 92
 - design contract requirements 91
 - design contract scope 91
 - professional liability insurance 93
 - use of purchase orders 92
- Design process management 100
- Design process phases 96
 - programming phase 97
 - schematic design phase 97
 - design development phase 97
 - construction documents phase 97
 - construction phase 98
 - commissioning phase 98
- Design reviews 99
- Designer for a design-build project 87
 - defining the design firm's scope of services 87
 - identifying and selecting a designer 87
 - need for a designer 87
 - professional qualifications 90
- Documenting green construction 180
- Drawings 54, 68

- Early start-up of permanently installed HVAC systems 178
- Energy efficiency 146

- Environmentally friendly jobsite
(see *Jobsite maintenance*)
- Ergonomics 167
- Equipment movement (See *Vehicle and equipment movement*)

- First-tier subcontractor (see *Subcontractor*)
- Functional completion 220
- Functional testing 218

- GBI (see *Green Building Initiative*)
- General conditions of contract 65
- Gilbane building company 228
- Green advantages 6
- Green building challenge 30
- Green building defined 2
- Green building evaluation systems
16
 - BREEAM 24, 30
 - CASBEE 30
 - GBTTool™ 30
 - Green Globes™ 24
 - LEED™ 17
- Green Building Initiative 25
- Green building product
 - characteristics (see *Product characteristics*)
- Green building product requirements analysis (see *Product requirements analysis*)
- Green construction documentation
(see *Documenting green construction*)
- Green Construction defined 5
- Green construction planning and scheduling (see *planning and scheduling*)

- Green construction process (see *Construction process*)
- Green criteria: establishing measurable criteria 85
- Green Globes™ certification 24
 - Green Building Initiative 25
 - Green Globes™ origins 24
 - Green Globes™ certification 27
 - Green Globes™ information 29
 - Green Globes™ rating system 25
 - Green Globes™ self assessment 27
 - Green Globes™ verification process 29
- Green seal requirements 146
- Green product bid package 151

- Healthfully maintained products 146
- Healthy work environment (see *Work environment*)

- IAQ (see *Indoor air quality*)
- IAQ guidelines for occupied buildings under construction 176
- Identifying green project requirements 44
- Indoor air quality 145
- Insurance coverage 73

- Japan sustainable building consortium (see *JSBC*)
- Jobsite maintenance 178
- Jobsite lighting 178
- JSBC 30

- Laydown areas 173
Lean construction and green 5
Low-toxic materials 145
Local workforce utilization 167
LEED™ certification 17
 LEED™ accredited professionals
 24
 LEED™ certification levels 22
 LEED™ information 23
 LEED™ rating systems 18
 LEED™-NC certification
 process 19
 U.S. green building council 17
- MasterFormat™ 48
 1995 edition 201
 2004 edition 202
 background 48, 201
 building commissioning 201
 Division 01: general
 requirements 49
 Division 25: integrated
 automation 203
 facility construction subgroup 52
 facility services subgroup 53
 groups 48
McGough construction 30
Material conservation 167
 material conservation planning
 168
 material conservation strategies
 168
Material protection 175
Material storage 175
Minimal chemical emission
 materials 145
Mixed specifications 47
Model green home building
 guidelines 25
- Moisture-resistant products 146
- NAHB 25
National Associations of Home
 Builders (see *NAHB*)
Natural resources canada 30
Navy league building project 9
Nontoxic materials 145
- Operational training 219
Operation and maintenance
 manuals 226
Oscar J. Boldt Construction 182
Owner-contractor agreement 64
- Performance specifications 46
Prefunctional equipment testing 214
 inspection 215
 testing 215
 startup 217
 documentation 217
Planning and scheduling 165
Prescriptive specifications 45
Price-based contractor selection 42
Procurement for green projects 147
 procurement procedure
 establishment 159
 product procurement process 156
 product requirements analysis 148
 supplier RFQ development 151
Product characteristics 140
 energy efficiency 146
 indoor air quality 145
 resource efficiency 140
 waste minimization 143
 water conservation 146
Product durability 143
Product local or regional content
 143

- Product local of regional production 143
- Product natural, plentiful, of renewable resource content 142
- Product procurement process 156
- Product recycled content 142
- Product requirements 138
 - general performance requirements 138
 - need to understand product requirements 139
 - partial performance requirements 139
 - specific product requirements 138
- Product requirements analysis 148
 - general green requirements 149
 - mixed green requirements 151
 - specific green requirements 151
- Product resource-efficient production 143
- Product reuse or recycle potential 143
- Product salvaged, refurbished, or remanufactured content 142
- Product screening process 146
- Professional licensing 90
- Professional liability insurance 93
 - claims-made coverage defined 95
 - coverage limitation periods 95
 - example professional liability insurance contractual requirement 96
 - hybrid coverage defined 95
 - insurance coverage period 95
 - need for professional liability insurance 94
 - occurrence coverage defined 95
- Project delivery 34
 - construction manager/general contractor 36
 - construction manager at risk 36, 38
 - design build 36, 39
 - design-bid-build 36, 37
 - project delivery system defined 35
- Project functional completion (see *Functional completion*)
- Qualifications-based selection 43
- Quality assurance and building commissioning 193
 - Quality defined 194
 - Quality control 194
 - Quality assurance 195
 - Quality planning 195
- Quality management systems
 - fundamentals and vocabulary (see *ANSI/ISO/ASQ Q9000*)
- R. J. Griffin & Company 11
- Responsibility for building performance (see *Building performance*)
- Resource efficiency 140
- Risk management methods 61
 - risk avoidance 64
 - risk reduction 62
 - risk retention 61
 - risk transfer 63
- Safety 166
- Second-tier subcontractor (see *Subsubcontractor*)
- Sediment runoff 173

- Shangri La Botanical Gardens and Nature Center Project 125
- Site erosion 173
- South Coast Air Quality Management District Rule No. 1168 145
- Spaw glass 101
- Spaw glass office building project 101
- Specialty contractor prequalification 112
- Special conditions of contract 67
- Specifications 44
 - as a contract document 68
 - conflicting specifications 47
 - descriptive specifications 45
 - mixed specifications 47
 - performance specifications 46
 - prescriptive specifications 45
 - specifications defined 44
- Southface eco office project 11
- Storage areas 173
- Stormwater management 173
- Subcontracting 109
 - basis for subcontractor scope 115
 - building commissioning 200
 - defining subcontractor scope 114
 - educating subcontractors 117
 - establishing subcontractor green criteria 116
 - educating subcontractors 117
 - green subcontract processes & procedures 116
 - selecting subcontractors 117
- Subcontract agreement 119
 - design management responsibilities 122
 - early startup of building systems 123
 - green flow-through requirements 119
 - green submittals 121
 - implicit green requirements 120
 - model subcontract agreements 119
 - subcontract documents 119
 - system startup and commissioning 123, 223
 - training subcontractors on-site 124
- Subcontract chain 110
- Subcontractor defined 109
- Subcontractor importance on green projects 111
- Subcontractor procurement responsibility 139
- Subcontractor's statement of qualifications 112
- Subsubcontractor defined 110
- Supplemental conditions of contract 65
- Supplier RFQ development 151
 - performance specification path 153
 - descriptive specification path 155
 - prescriptive specification path 155
- Sustainable development definition 2
- TAB (see *Testing adjusting, and balancing*)
- Testing adjusting, and balancing 217
- Texas Instruments R-Fab Project 55
- Trailer areas 173

262 Index

USGBC (see *U.S. Green Building Council*)
U.S. Green Building Council 17

Vehicle and equipment movement
172

Waste management 174
Waste minimization 143
Wastewater management 173
Water conservation 146

WCED 2
Wisconsin river valley office and
warehouse 182
Workforce conservation 166
 need to conserve the workforce
 166
 safety 166
 ergonomics 167
 local workforce utilization 167
Work environment 176
World commission on environment
and development (see
WCED)

