



Commercial Renovation Costs

with RSMeans Data

A photograph of a commercial renovation site. The scene shows a long, brightly lit hallway with white walls and a light-colored floor. A yellow caution tape is visible on the left wall. A blue broom and dustpan are leaning against the wall on the left. A large window is at the end of the hallway. A silver step ladder is on the right side of the hallway. A blue step ladder is visible in the background near the window. A blue step ladder is also visible in the background near the window.

2024

45th annual edition

Commercial Renovation Costs with RSMeans Data

Scott Keller, Senior Editor

GORDIAN®

2024

45th annual edition

Chief Product Officer

Chris Gaudreau

**Chief Technology
Officer**

Chris Gaudreau

**Director, Data
Operations**

Sam Giffin

**Engineering and
Research**

Matthew Doheny,
Sr. Manager

**Engineers:
Architectural Divisions**

1, 3, 4, 5, 6, 7, 8, 9, 10, 11,
12, 13, 41

Sam Babbitt

Stephen Bell

Richard Goldin

Scott Keller

Thomas Lane

Melissa Stewart

**Engineers: Civil
Divisions and Wages**

2, 31, 32, 33, 34, 35,
44, 46

Derrick Hale, PE

Christopher Babbitt

Michael Lynch

Elisa Mello

Giles Munyard

David Yazbek

**Engineers: Mechanical,
Electrical, Plumbing &
Conveying Divisions**

14, 21, 22, 23, 25, 26, 27,
28, 48

Joseph Kelble

Brian Adams

Michelle Curran

Antonio D'Aulerio

Thomas Lyons

Jake MacDonald

Chris Clough

Contributing Engineers

John Melin, PE, Manager

Paul Cowan

Gerard Lafond, PE

Matthew Sorrentino

Production

Debra Panarelli, Manager

Sheryl Rose

Janice Thalin

Data Quality

Patrice Bruesch

Ellen D'Amico

Cover Design

Blaire Collins

**Data Management
Ecosystem**

Audrey Considine

Kedar Gaikwad

Mike Bruesch

Jonathan Forgit



RSMeans Data from Gordian

Construction Publishers & Consultants

30 Patewood Dr., Suite 350

Greenville, SC 29615

United States of America

1.800.448.8182

rsmeans.com

Copyright 2023 by The Gordian Group Inc.

All rights reserved.

Cover photo © iStock.com/Pulvret80

Printed in the United States of America

ISSN 2161-4628

ISBN 978-1-961006-02-7

Gordian's authors, editors, and engineers apply diligence and judgment in locating and using reliable sources for the information published. However, Gordian makes no express or implied warranty or guarantee in connection with the content of the information contained herein, including the accuracy, correctness, value, sufficiency, or completeness of the data, methods, and other information contained herein. Gordian makes no express or implied warranty of merchantability or fitness for a particular purpose. Gordian shall have no liability to any customer or third party for any loss, expense, or damage, including consequential, incidental, special, or punitive damage, including lost profits or lost revenue, caused directly or indirectly by any error or omission, or arising out of, or in connection with, the information contained herein. For the purposes of this paragraph, "Gordian" shall include The Gordian Group, Inc., and its divisions, subsidiaries, successors, parent companies, and their employees, partners, principals, agents and representatives, and any third-party providers or sources of information or data. Gordian grants the purchaser of this publication limited license to use the cost data

contained herein for purchaser's internal business purposes in connection with construction estimating and related work. The publication, and all cost data contained herein, may not be reproduced, integrated into any software or computer program, developed into a database or other electronic compilation, stored in an information storage or retrieval system, or transmitted or distributed to anyone in any form or by any means, electronic or mechanical, including photocopying or scanning, without prior written permission of Gordian. This publication is subject to protection under copyright law, trade secret law and other intellectual property laws of the United States, Canada and other jurisdictions. Gordian and its affiliates exclusively own and retain all rights, title and interest in and to this publication and the cost data contained herein including, without limitation, all copyright, patent, trademark and trade secret rights. Except for the limited license contained herein, your purchase of this publication does not grant you any intellectual property rights in the publication or the cost data.

0424

\$400.00 per copy (in United States)

Price is subject to change without prior notice.

Table of Contents

Foreword	iv
How the Cost Data Is Built: An Overview	v
Estimating with RSMeans Data: Unit Prices	vii
How to Use the Cost Data: The Details	ix
Unit Price Section	1
RSMeans Data: Unit Prices—How They Work	4
Assemblies Section	599
RSMeans Data: Assemblies—How They Work	602
Reference Section	745
Construction Equipment Rental Costs	747
Crew Listings	759
Historical Cost Indexes	795
City Cost Indexes	796
Location Factors	839
Reference Tables	845
Change Orders	889
Project Costs	893
Abbreviations	898
Index	902
Training Class Options	930
Labor Trade Rates including Overhead & Profit	Inside Back Cover

Unit Price Section

Table of Contents

Sect. No.	Page	Sect. No.	Page	Sect. No.	Page
	General Requirements				
01 11	Summary of Work	04 71	Manufactured Brick Masonry	07 55	Protected Membrane Roofing
01 21	Allowances	04 72	Cast Stone Masonry	07 56	Fluid-Applied Roofing
01 31	Project Management and	04 73	Manufactured Stone Masonry	07 57	Coated Foamed Roofing
	Coordination		Metals	07 58	Roll Roofing
01 41	Regulatory Requirements	05 05	Common Work Results for Metals ...	07 61	Sheet Metal Roofing
01 45	Quality Control	05 12	Structural Steel Framing	07 62	Sheet Metal Flashing and Trim
01 51	Temporary Utilities	05 15	Wire Rope Assemblies	07 65	Flexible Flashing
01 52	Construction Facilities	05 21	Steel Joist Framing	07 71	Roof Specialties
01 54	Construction Aids	05 31	Steel Decking	07 72	Roof Accessories
01 55	Vehicular Access and Parking	05 35	Raceway Decking Assemblies	07 76	Roof Pavers
01 56	Temporary Barriers and Enclosures ..	05 41	Structural Metal Stud Framing	07 81	Applied Fireproofing
01 57	Temporary Controls	05 42	Cold-Formed Metal Joist Framing	07 84	Firestopping
01 58	Project Identification	05 44	Cold-Formed Metal Trusses	07 91	Preformed Joint Seals
01 66	Product Storage and Handling	05 51	Metal Stairs	07 92	Joint Sealants
	Requirements	05 52	Metal Railings	07 95	Expansion Control
01 71	Examination and Preparation	05 55	Metal Stair Treads and Nosings		Openings
01 74	Cleaning and Waste Management	05 56	Metal Castings	08 01	Operation and Maintenance
01 76	Protecting Installed Construction	05 58	Formed Metal Fabrications		of Openings
01 91	Commissioning	05 71	Decorative Metal Stairs	08 05	Common Work Results
01 93	Facility Maintenance	05 73	Decorative Metal Railings		for Openings
	Existing Conditions	05 75	Decorative Formed Metal	08 11	Metal Doors and Frames
02 21	Surveys		Wood, Plastics & Composites	08 12	Metal Frames
02 31	Geophysical Investigations	06 05	Common Work Results for Wood,	08 13	Metal Doors
02 32	Geotechnical Investigations		Plastics, and Composites	08 14	Wood Doors
02 41	Demolition	06 11	Wood Framing	08 16	Composite Doors
02 42	Removal and Diversion of	06 12	Structural Panels	08 17	Integrated Door Opening
	Construction Materials	06 13	Heavy Timber Construction		Assemblies
02 43	Structure Moving	06 15	Wood Decking	08 31	Access Doors and Panels
02 58	Snow Control	06 16	Sheathing	08 32	Sliding Glass Doors
02 65	Underground Storage	06 17	Shop-Fabricated Structural Wood	08 33	Coiling Doors and Grilles
	Tank Removal	06 18	Glued-Laminated Construction	08 34	Special Function Doors
02 81	Transportation and Disposal of	06 22	Millwork	08 36	Panel Doors
	Hazardous Materials	06 25	Prefinished Paneling	08 38	Traffic Doors
02 82	Asbestos Remediation	06 26	Board Paneling	08 41	Entrances and Storefronts
02 83	Lead Remediation	06 43	Wood Stairs and Railings	08 42	Entrances
02 87	Biohazard Remediation	06 44	Ornamental Woodwork	08 43	Storefronts
	Concrete	06 48	Wood Frames	08 45	Translucent Wall and Roof
03 01	Maintenance of Concrete	06 49	Wood Screens and Exterior Wood		Assemblies
03 05	Common Work Results		Shutters	08 51	Metal Windows
	for Concrete	06 51	Structural Plastic Shapes and Plates ..	08 52	Wood Windows
03 11	Concrete Forming	06 52	Plastic Structural Assemblies	08 53	Plastic Windows
03 15	Concrete Accessories	06 63	Plastic Railings	08 54	Composite Windows
03 21	Reinforcement Bars	06 65	Plastic Trim	08 56	Special Function Windows
03 22	Fabric and Grid Reinforcing	06 73	Composite Decking	08 61	Roof Windows
03 24	Fibrous Reinforcing	06 81	Composite Railings	08 62	Unit Skylights
03 30	Cast-In-Place Concrete		Thermal & Moisture Protection	08 63	Metal-Framed Skylights
03 31	Structural Concrete	07 01	Operation and Maint. of Thermal	08 71	Door Hardware
03 35	Concrete Finishing		and Moisture Protection	08 75	Window Hardware
03 37	Specialty Placed Concrete	07 05	Common Work Results for	08 79	Hardware Accessories
03 39	Concrete Curing		Thermal and Moisture Protection ...	08 81	Glass Glazing
03 41	Precast Structural Concrete	07 11	Dampproofing	08 83	Mirrors
03 45	Precast Architectural Concrete	07 12	Built-up Bituminous Waterproofing ..	08 84	Plastic Glazing
03 48	Precast Concrete Specialties	07 13	Sheet Waterproofing	08 85	Glazing Accessories
03 51	Cast Roof Decks	07 16	Cementitious and Reactive	08 87	Glazing Surface Films
03 52	Lightweight Concrete Roof		Waterproofing	08 88	Special Function Glazing
	Insulation	07 19	Water Repellents	08 91	Louvers
03 53	Concrete Topping	07 21	Thermal Insulation	08 95	Vents
03 54	Cast Underlayment	07 22	Roof and Deck Insulation		Finishes
03 63	Epoxy Grouting	07 24	Exterior Insulation and	09 01	Maintenance of Finishes
03 81	Concrete Cutting		Finish Systems	09 05	Common Work Results
03 82	Concrete Boring	07 25	Weather Barriers		for Finishes
	Masonry	07 26	Vapor Retarders	09 21	Plaster and Gypsum Board
04 01	Maintenance of Masonry	07 27	Air Barriers		Assemblies
04 05	Common Work Results	07 31	Shingles and Shakes	09 22	Supports for Plaster and
	for Masonry	07 32	Roof Tiles		Gypsum Board
04 21	Clay Unit Masonry	07 33	Natural Roof Coverings	09 23	Gypsum Plastering
04 22	Concrete Unit Masonry	07 41	Roof Panels	09 24	Cement Plastering
04 23	Glass Unit Masonry	07 42	Wall Panels	09 25	Other Plastering
04 27	Multiple-Wythe Unit Masonry	07 46	Siding	09 26	Veneer Plastering
04 41	Dry-Placed Stone	07 51	Built-Up Bituminous Roofing	09 28	Backing Boards and Underlayments
04 43	Stone Masonry	07 52	Modified Bituminous Membrane	09 29	Gypsum Board
04 54	Refractory Brick Masonry		Roofing	09 30	Tiling
04 57	Masonry Fireplaces	07 53	Elastomeric Membrane Roofing	09 31	Thin-Set Tiling
		07 54	Thermoplastic Membrane Roofing ...	09 32	Mortar-Bed Tiling

Table of Contents

Sect. No.	Page	Sect. No.	Page	Sect. No.	Page
09 34	Waterproofing-Membrane Tiling 318	11 98	Detention Equipment 386		
09 35	Chemical-Resistant Tiling 318		Furnishings	23 05	Heating Ventilation Air Conditioning
09 51	Acoustical Ceilings 319	12 21	Window Blinds 388	23 07	Common Work Results for HVAC ... 456
09 53	Acoustical Ceiling Suspension Assemblies 320	12 23	Interior Shutters 388	23 09	HVAC Insulation 458
09 54	Specialty Ceilings 321	12 24	Window Shades 389		Instrumentation and Control for HVAC 458
09 61	Flooring Treatment 322	12 32	Manufactured Wood Casework 389	23 21	Hydronic Piping and Pumps 460
09 62	Specialty Flooring 322	12 34	Manufactured Plastic Casework 391	23 23	Refrigerant Piping 461
09 63	Masonry Flooring 323	12 35	Specialty Casework 391	23 31	HVAC Ducts and Casings 463
09 64	Wood Flooring 324	12 36	Countertops 392	23 33	Air Duct Accessories 464
09 65	Resilient Flooring 325	12 48	Rugs and Mats 394	23 34	HVAC Fans 466
09 66	Terrazzo Flooring 328	12 51	Office Furniture 394	23 36	Air Terminal Units 468
09 67	Fluid-Applied Flooring 329	12 54	Hospitality Furniture 394	23 37	Air Outlets and Inlets 468
09 68	Carpeting 329	12 55	Detention Furniture 395	23 38	Ventilation Hoods 470
09 69	Access Flooring 331	12 56	Institutional Furniture 395	23 41	Particulate Air Filtration 470
09 72	Wall Coverings 331	12 63	Stadium and Arena Seating 396	23 42	Gas-Phase Air Filtration 471
09 74	Flexible Wood Sheets 333	12 67	Pews and Benches 396	23 43	Electronic Air Cleaners 471
09 77	Special Wall Surfacing 333	12 93	Interior Public Space Furnishings 396	23 51	Breechings, Chimneys, and Stacks ... 471
09 81	Acoustic Insulation 334		Special Construction	23 52	Heating Boilers 473
09 84	Acoustic Room Components 334	13 05	Common Work Results for Special Construction 398	23 54	Furnaces 474
09 91	Painting 335	13 12	Fountains 401	23 55	Fuel-Fired Heaters 476
09 93	Staining and Transparent Finishing .. 346	13 17	Tubs and Pools 402	23 56	Solar Energy Heating Equipment 476
09 96	High-Performance Coatings 346	13 21	Controlled Environment Rooms 402	23 61	Refrigerant Compressors 478
09 97	Special Coatings 347	13 24	Special Activity Rooms 402	23 62	Packaged Compressor and Condenser Units 478
	Specialties	13 28	Athletic and Recreational Special Construction 403	23 64	Packaged Water Chillers 479
10 11	Visual Display Units 350	13 34	Fabricated Engineered Structures 403	23 65	Cooling Towers 479
10 13	Directories 351	13 42	Building Modules 404	23 72	Air-to-Air Energy Recovery Equipment 480
10 14	Signage 351	13 48	Sound, Vibration, and Seismic Control 404	23 73	Indoor Central-Station Air-Handling Units 480
10 17	Telephone Specialties 352	13 49	Radiation Protection 404	23 74	Packaged Outdoor HVAC Equipment 481
10 21	Compartments and Cubicles 353		Conveying Equipment	23 81	Decentralized Unitary HVAC Equipment 481
10 22	Partitions 357	14 11	Manual Dumbwaiters 408	23 82	Convection Heating and Cooling Units 484
10 26	Wall and Door Protection 359	14 12	Electric Dumbwaiters 408	23 83	Radiant Heating Units 487
10 28	Toilet, Bath, and Laundry Accessories 359	14 21	Electric Traction Elevators 408	23 84	Humidity Control Equipment 487
10 31	Manufactured Fireplaces 361	14 24	Hydraulic Elevators 409	23 91	Prefabricated Equipment Supports ... 488
10 32	Fireplace Specialties 362	14 27	Custom Elevator Cabs and Doors 410		Integrated Automation
10 35	Stoves 363	14 28	Elevator Equipment and Controls ... 411	25 05	Common Work Results for Integrated Automation 490
10 43	Emergency Aid Specialties 363	14 42	Wheelchair Lifts 412	25 36	Integrated Automation Instrumentation & Terminal Devices 490
10 44	Fire Protection Specialties 363	14 45	Vehicle Lifts 412		Electrical
10 51	Lockers 364	14 91	Facility Chutes 413	26 01	Operation and Maintenance of Electrical Systems 492
10 55	Postal Specialties 365	14 92	Pneumatic Tube Systems 413	26 05	Common Work Results for Electrical 493
10 56	Storage Assemblies 365		Fire Suppression	26 22	Low-Voltage Transformers 510
10 57	Wardrobe and Closet Specialties 365	21 05	Common Work Results for Fire Suppression 416	26 24	Switchboards and Panelboards 510
10 73	Protective Covers 366	21 11	Facility Fire-Suppression Water-Service Piping 416	26 27	Low-Voltage Distribution Equipment 512
10 74	Manufactured Exterior Specialties 368	21 12	Fire-Suppression Standpipes 416	26 28	Low-Voltage Circuit Protective Devices 515
10 86	Security Mirrors and Domes 368	21 13	Fire-Suppression Sprinkler Systems .. 417	26 29	Low-Voltage Controllers 516
	Equipment		Plumbing	26 32	Packaged Generator Assemblies 517
11 11	Vehicle Service Equipment 370	22 01	Operation and Maintenance of Plumbing 420	26 33	Battery Equipment 518
11 12	Parking Control Equipment 370	22 05	Common Work Results for Plumbing 421	26 51	Interior Lighting 518
11 13	Loading Dock Equipment 371	22 07	Plumbing Insulation 423	26 52	Safety Lighting 520
11 21	Retail and Service Equipment 371	22 11	Facility Water Distribution 424	26 55	Special Purpose Lighting 521
11 22	Banking Equipment 373	22 13	Facility Sanitary Sewerage 438	26 56	Exterior Lighting 522
11 30	Residential Equipment 373	22 14	Facility Storm Drainage 442	26 61	Lighting Systems and Accessories ... 523
11 32	Unit Kitchens 375	22 15	General Service Compressed-Air Systems 443		Communications
11 41	Foodservice Storage Equipment 375	22 31	Domestic Water Softeners 443	27 13	Communications Backbone Cabling 526
11 42	Food Preparation Equipment 377	22 33	Electric Domestic Water Heaters 443	27 15	Communications Horizontal Cabling 527
11 43	Food Delivery Carts and Conveyors .. 378	22 34	Fuel-Fired Domestic Water Heaters .. 444	27 32	Voice Communications Terminal Equipment 528
11 44	Food Cooking Equipment 378	22 41	Residential Plumbing Fixtures 445	27 41	Audio-Video Systems 528
11 46	Food Dispensing Equipment 379	22 42	Commercial Plumbing Fixtures 448	27 51	Distributed Audio-Video Communications Systems 528
11 48	Foodservice Cleaning and Disposal Equipment 380	22 43	Healthcare Plumbing Fixtures 450		
11 52	Audio-Visual Equipment 380	22 45	Emergency Plumbing Fixtures 450		
11 53	Laboratory Equipment 381	22 47	Drinking Fountains and Water Coolers 451		
11 57	Vocational Shop Equipment 381	22 66	Chemical-Waste Systems for Lab. and Healthcare Facilities 452		
11 61	Broadcast, Theater, and Stage Equipment 382				
11 66	Athletic Equipment 382				
11 71	Medical Sterilizing Equipment 383				
11 76	Operating Room Equipment 384				
11 81	Facility Maintenance Equipment 384				
11 82	Facility Solid Waste Handling Equipment 384				
11 91	Religious Equipment 385				
11 97	Security Equipment 385				

<i>Sect. No.</i>	<i>Page</i>	<i>Sect. No.</i>	<i>Page</i>	<i>Sect. No.</i>	<i>Page</i>
	Electronic Safety & Security		Exterior Improvements	33 05	Common Work Results
28 15	Access Control Hardware Devices ... 530	32 01	Operation and Maintenance of		for Utilities 584
28 18	Security Access Detection		Exterior Improvements 556	33 11	Groundwater Sources 585
	Equipment 530	32 06	Schedules for Exterior	33 14	Water Utility Transmission and
28 23	Video Management System 531		Improvements 562		Distribution 586
28 31	Intrusion Detection 531	32 11	Base Courses 563	33 31	Sanitary Sewerage Piping 586
28 46	Fire Detection and Alarm 531	32 12	Flexible Paving 563	33 34	Onsite Wastewater Disposal 587
28 47	Mass Notification 533	32 13	Rigid Paving 566	33 42	Stormwater Conveyance 588
	Earthwork	32 14	Unit Paving 566	33 52	Hydrocarbon Transmission and
31 05	Common Work Results for	32 16	Curbs, Gutters, Sidewalks, and		Distribution 589
	Earthwork 536		Driveways 567	33 71	Electrical Utility Transmission and
31 06	Schedules for Earthwork 536	32 17	Paving Specialties 568		Distribution 591
31 14	Earth Stripping and Stockpiling 537	32 31	Fences and Gates 570		Transportation
31 23	Excavation and Fill 537	32 32	Retaining Walls 573	34 71	Roadway Construction 594
31 25	Erosion and Sedimentation	32 33	Site Furnishings 573		Material Processing & Handling Equipment
	Controls 551	32 84	Planting Irrigation 574	41 22	Cranes and Hoists 596
31 31	Soil Treatment 551	32 91	Planting Preparation 574		Electrical Power Generation
31 41	Shoring 551	32 92	Turf and Grasses 576	48 13	Hydroelectric Plant Electrical Power
31 43	Concrete Raising 552	32 93	Plants 577		Generation Equipment 598
31 46	Needle Beams 552	32 94	Planting Accessories 579		
31 48	Underpinning 552	32 96	Transplanting 579		
31 62	Driven Piles 553		Utilities		
31 63	Bored Piles 553	33 01	Operation and Maintenance		
			of Utilities 582		

Assemblies Section

Table of Contents

<i>Table No.</i>	<i>Page</i>
A SUBSTRUCTURE	
A1010 Standard Foundations	
A1010 120 Strip Footing	608
A1010 230 Spread Footing	609
A1010 310 Foundation Underdrain	610
A1030 Slab on Grade	
A1030 110 Interior Slab on Grade	611
A2010 Basement Excavation	
A2010 130 Excavation, Footings or Trench	612
A2010 140 Excavation, Foundation	613
A2020 Basement Walls	
A2020 120 Concrete Wall	614
A2020 140 Concrete Block Wall	615
B SHELL	
B1010 Floor Construction	
B1010 225 Floor - Ceiling, Concrete Slab	618
B1010 232 Floor - Ceiling, Conc. Panel	619
B1010 233 Floor - Ceiling, Conc. Plank	620
B1010 243 Floor - Ceiling, Struc. Steel	621
B1010 245 Floor - Ceiling, Steel Joists	622
B1010 262 Open Web Wood Joists	623
B1010 263 Floor-Ceiling, Wood Joists	624
B1020 Roof Construction	
B1020 106 Steel Joist Roof & Ceiling	625
B1020 202 Wood Frame Roof & Ceiling	626
B1020 210 Roof Truss, Wood	627
B2010 Exterior Walls	
B2010 108 Masonry Wall, Concrete Block	629
B2010 131 Masonry Wall, Brick - Stone	630
B2010 142 Parapet Wall	631
B2010 143 Masonry Restoration - Cleaning	632
B2010 150 Wood Frame Exterior Wall	633
B2010 190 Selective Price Sheet	634
B2020 Exterior Windows	
B2020 108 Vinyl Clad Windows	636
B2020 110 Windows - Aluminum	637
B2020 112 Windows - Wood	638
B2020 116 Storm Windows & Doors	639
B2020 124 Aluminum Frame, Window Wall	640
B2030 Exterior Doors	
B2030 125 Doors, Metal - Commercial	641
B2030 150 Doors, Sliding - Patio	642
B2030 240 Doors, Residential - Exterior	643
B2030 410 Doors, Overhead	644
B2030 810 Selective Price Sheet	645

<i>Table No.</i>	<i>Page</i>
B3010 Roof Coverings	
B3010 160 Selective Price Sheet	647
B3020 Roof Openings	
B3020 230 Roof Hatches, Skylights	649
B3020 240 Selective Price Sheet	650
C INTERIORS	
C1010 Partitions	
C1010 106 Partitions, Concrete Block	654
C1010 132 Partitions, Wood Stud	655
C1010 134 Partitions, Metal Stud, NLB	656
C1010 136 Partitions, Drywall	657
C1010 138 Partitions, Metal Stud, LB	658
C1010 148 Partitions, Plaster & Lath	659
C1010 170 Selective Price Sheet	660
C1010 180 Selective Price Sheet, Drywall & Plaster	662
C1010 210 Partitions, Movable Office	663
C1020 Interior Doors	
C1020 106 Doors, Interior Flush, Wood	664
C1020 108 Doors, Interior Solid & Louvered	665
C1020 110 Doors, Interior Flush, Metal	666
C1020 112 Doors, Closet	667
C2010 Stair Construction	
C2010 130 Stairs	668
C3010 Wall Finishes	
C3010 210 Selective Price Sheet	669
C3020 Floor Finishes	
C3020 430 Selective Price Sheet	671
C3030 Ceiling Finishes	
C3030 210 Ceiling, Suspended Acoustical	673
C3030 220 Ceilings, Suspended Gypsum Board	674
C3030 230 Ceiling, Suspended Plaster	675
C3030 250 Selective Price Sheet	676
D SERVICES	
D1010 Elevators and Lifts	
D1010 130 Oil Hydraulic Elevators	680
D2010 Plumbing Fixtures	
D2010 956 Plumbing - Public Restroom	681
D2010 957 Plumbing - Public Restroom	683
D2010 958 Plumbing - Two Fixture Bathroom	685
D2010 959 Plumbing - Three Fixture Bathroom	686
D2010 960 Plumbing - Three Fixture Bathroom	687
D2010 961 Plumbing - Three Fixture Bathroom	688
D2010 962 Plumbing - Four Fixture Bathroom	689
D2010 963 Plumbing - Five Fixture Bathroom	690

Table of Contents

Table No.	Page
D3010 Energy Supply	
D3010 540 Heating - Oil Fired Hot Water	692
D3010 550 Heating - Gas Fired Hot Water	693
D3010 991 Wood Burning Stoves	694
D3010 992 Masonry Fireplace	695
D3020 Heat Generating Systems	
D3020 122 Heating-Cooling, Oil, Forced Air	696
D3020 124 Heating-Cooling, Gas, Forced Air	697
D3020 130 Boiler, Cast Iron, Hot Water, Gas	698
D3020 134 Boiler, Cast Iron, Steam, Gas	699
D3020 136 Boiler, Cast Iron, Hot Water, Gas/Oil	699
D3020 138 Boiler, Cast Iron, Steam, Gas/Oil	699
D3020 330 Circulating Pump Systems, End Suction	700
D3040 Distribution Systems	
D3040 118 Fan Coil A/C Unit, Two Pipe	702
D3040 120 Fan Coil A/C Unit, Two Pipe, Electric Heat	702
D3040 122 Fan Coil A/C Unit, Four Pipe	703
D3040 124 Fan Coil A/C, Horizontal, Duct Mount, 2 Pipe	703
D3040 126 Fan Coil A/C, Horiz., Duct Mount, 2 Pipe, Elec. Ht.	703
D3040 610 Heat Exchanger, Plate Type	704
D3040 620 Heat Exchanger, Shell & Tube	704
D3050 Terminal & Package Units	
D3050 120 Unit Heaters, Gas	706
D3050 130 Unit Heaters, Hydronic	706
D3050 140 Cabinet Unit Heaters, Hydronic	707
D3050 175 Rooftop Air Conditioner, Const. Volume	708
D3050 180 Rooftop Air Conditioner, Variable Air Volume	708
D3050 210 AC Unit, Package, Elec. Ht., Water Cooled	710
D3050 215 AC Unit, Package, Elec. Ht., Water Cooled, VAV	710
D3050 220 AC Unit, Package, Hot Water Coil, Water Cooled	711
D3050 225 AC Unit, Package, HW Coil, Water Cooled, VAV	711
D3050 255 Thru-Wall A/C Unit	712
D3050 260 Thru-Wall Heat Pump	712
D4010 Sprinklers	
D4010 320 Fire Sprinkler Systems, Dry	713
D4010 420 Fire Sprinkler Systems, Wet	715
D5010 Electrical Service/Distribution	
D5010 210 Commercial Service - 3 Phase	716
D5010 220 Residential Service - Single Phase	717

Table No.	Page
D5020 Lighting and Branch Wiring	
D5020 180 Selective Price Sheet	718
D5020 248 Lighting, Fluorescent	720
D5020 250 Lighting, Incandescent	721
D5020 252 Lighting, High Intensity	722
D5090 Other Electrical Systems	
D5090 530 Heat, Baseboard	723
E EQUIPMENT & FURNISHINGS	
E1090 Other Equipment	
E1090 310 Kitchens	726
E1090 315 Selective Price Sheet	727
G BUILDING SITEWORK	
G1030 Site Earthwork	
G1030 810 Excavation, Utility Trench	730
G2010 Roadways	
G2010 240 Driveways	731
G2020 Parking Lots	
G2020 230 Parking Lots, Asphalt	732
G2020 240 Parking Lots, Concrete	733
G2030 Pedestrian Paving	
G2030 105 Sidewalks	734
G2050 Landscaping	
G2050 420 Landscaping - Lawn Establishment	735
G2050 510 Selective Price Sheet	736
G3020 Sanitary Sewer	
G3020 610 Septic Systems	738
G3060 Fuel Distribution	
G3060 310 Fiberglass Fuel Tank, Double Wall	739
G3060 320 Steel Fuel Tank, Double Wall	741
G3060 325 Steel Tank, Above Ground, Single Wall	742
G3060 330 Steel Tank, Above Ground, Double Wall	742
G4020 Site Lighting	
G4020 210 Light Pole (Installed)	743

Reference Section

All the reference information is in one section, making it easy to find what you need to know . . . and easy to use the data set on a daily basis. This section is visually identified by a vertical black bar on the page edges.

In this Reference Section, we've included Equipment Rental Costs, a listing of rental and operating costs; Crew Listings, a full listing of all crews and equipment, and their costs; Historical Cost Indexes for cost comparisons over time; City Cost Indexes and Location Factors for adjusting costs to the region you are in; Reference Tables, where you will find explanations, estimating information and procedures, or technical data; Change Orders, information on pricing changes to contract documents; and an explanation of all the Abbreviations in the data set.

Table of Contents

Construction Equipment Rental Costs	747
Crew Listings	759
Historical Cost Indexes	795
City Cost Indexes	796
Location Factors	839
Reference Tables	845
R01 General Requirements.....	845
R02 Existing Conditions	858
R03 Concrete.....	861
R04 Masonry	871
R05 Metals	872
R06 Wood, Plastics & Composites	874
R07 Thermal & Moisture Protection	874
R08 Openings.....	876
R09 Finishes	879
R14 Conveying Equipment.....	881

Reference Tables (cont.)

R22 Plumbing	882
R26 Electrical.....	883
R31 Earthwork	885
R32 Exterior Improvements.....	887
R33 Utilities.....	888
Change Orders	889
Project Costs	893
Abbreviations	898