



GORDIAN[®]
Open Shop
Building
Construction
Costs
with RSMeans[™] Data

2025

41st annual edition

Open Shop Building Construction Costs with RSMeans™ Data

Matthew Doheny, Senior Editor

GORDIAN®

2025

41st annual edition

Chief Product Officer

Chris Gaudreau

Chief Technology Officer

Seth Gregorie

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

Richard Goldin

Scott Keller

Chris Pedersen

Melissa Stewart

Engineers: Civil Divisions

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

Derrick Hale, PE

Michael Lynch

Giles Munyard

Engineers: Mechanical, Electrical, Plumbing & Conveying Divisions

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

Brian Adams

Michelle Curran

Antonio D'Aulerio

Chris Clough

Contributing Engineers

John Melin, PE, Manager

Paul Cowan

Thomas Lyons

Matthew Sorrentino

Production

Debra Panarelli, Manager

Sheryl Rose

Janice Thalín

Data Analysis

Yonique McNeil

Ellen D'Amico

Cover Design

Blaire Collins

Data Engineering

Monique Law

Kedar Gaikwad

Mike Bruesch

Jonathan Forgit

City Cost Index

Adam Raimond

Labor Research

Elisa Mello

David Yazbek



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 2024 by The Gordian Group Inc.

All rights reserved.

Cover photo © iStock.com/Purdue9394

Printed in the United States of America

ISSN 0883-8127

ISBN 978-1-961006-64-5

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.

1525

\$468.00 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
Reference Section	709
Construction Equipment Rental Costs	711
Crew Listings	723
Historical Cost Indexes	758
City Cost Indexes	759
Location Factors	802
Reference Tables	808
Change Orders	870
Project Costs	873
Abbreviations	878
Index	882
Training Class Options	916
Labor Trade Rates including Overhead & Profit	Inside Back Cover

Table of Contents (cont.)

<i>Sect. No.</i>	<i>Page</i>	<i>Sect. No.</i>	<i>Page</i>	<i>Sect. No.</i>	<i>Page</i>
09 24	Cement Plastering	338	11 46	Food Dispensing Equipment	424
09 25	Other Plastering	338	11 48	Foodservice Cleaning and Disposal Equipment	425
09 26	Veneer Plastering	338	11 52	Audio-Visual Equipment	425
09 28	Backing Boards and Underlayments	339	11 53	Laboratory Equipment	426
09 29	Gypsum Board	340	11 57	Vocational Shop Equipment	428
09 30	Tiling	344	11 61	Broadcast, Theater, and Stage Equipment	428
09 31	Thin-Set Tiling	344	11 62	Musical Equipment	429
09 32	Mortar-Bed Tiling	345	11 66	Athletic Equipment	429
09 34	Waterproofing-Membrane Tiling	347	11 67	Recreational Equipment	431
09 35	Chemical-Resistant Tiling	347	11 68	Play Field Equipment and Structures	431
09 51	Acoustical Ceilings	348	11 71	Medical Sterilizing Equipment	433
09 53	Acoustical Ceiling Suspension Assemblies	349	11 72	Examination and Treatment Equipment	433
09 54	Specialty Ceilings	350	11 73	Patient Care Equipment	433
09 57	Special Function Ceilings	351	11 74	Dental Equipment	434
09 61	Flooring Treatment	351	11 76	Operating Room Equipment	435
09 62	Specialty Flooring	351	11 77	Radiology Equipment	435
09 63	Masonry Flooring	352	11 78	Mortuary Equipment	435
09 64	Wood Flooring	352	11 81	Facility Maintenance Equipment	436
09 65	Resilient Flooring	354	11 82	Facility Solid Waste Handling Equipment	436
09 66	Terrazzo Flooring	357	11 91	Religious Equipment	437
09 67	Fluid-Applied Flooring	359	11 97	Security Equipment	438
09 68	Carpeting	360	11 98	Detention Equipment	438
09 69	Access Flooring	362		Furnishings	
09 72	Wall Coverings	362	12 21	Window Blinds	440
09 74	Flexible Wood Sheets	364	12 22	Curtains and Drapes	440
09 77	Special Wall Surfacing	364	12 23	Interior Shutters	441
09 81	Acoustic Insulation	364	12 24	Window Shades	441
09 84	Acoustic Room Components	365	12 32	Manufactured Wood Casework	442
09 91	Painting	365	12 35	Specialty Casework	444
09 93	Staining and Transparent Finishing	376	12 36	Countertops	445
09 96	High-Performance Coatings	376	12 46	Furnishing Accessories	448
09 97	Special Coatings	378	12 48	Rugs and Mats	448
	Specialties		12 51	Office Furniture	449
10 05	Common Work Results for Specialties	380	12 52	Seating	450
10 11	Visual Display Units	380	12 54	Hospitality Furniture	450
10 13	Directories	383	12 55	Detention Furniture	451
10 14	Signage	384	12 56	Institutional Furniture	451
10 17	Telephone Specialties	386	12 61	Fixed Audience Seating	452
10 21	Compartments and Cubicles	386	12 63	Stadium and Arena Seating	453
10 22	Partitions	390	12 67	Pews and Benches	453
10 26	Wall and Door Protection	393	12 92	Interior Planters and Artificial Plants	453
10 28	Toilet, Bath, and Laundry Accessories	394	12 93	Interior Public Space Furnishings	454
10 31	Manufactured Fireplaces	397		Special Construction	
10 32	Fireplace Specialties	398	13 05	Common Work Results for Special Construction	456
10 35	Stoves	399	13 11	Swimming Pools	459
10 43	Emergency Aid Specialties	399	13 12	Fountains	461
10 44	Fire Protection Specialties	399	13 17	Tubs and Pools	461
10 51	Lockers	400	13 18	Ice Rinks	462
10 55	Postal Specialties	402	13 21	Controlled Environment Rooms	462
10 56	Storage Assemblies	402	13 24	Special Activity Rooms	464
10 57	Wardrobe and Closet Specialties	403	13 28	Athletic and Recreational Special Construction	465
10 73	Protective Covers	404	13 31	Fabric Structures	465
10 74	Manufactured Exterior Specialties	405	13 33	Geodesic Structures	467
10 75	Flagpoles	406	13 34	Fabricated Engineered Structures	467
10 81	Pest Control Devices	407	13 36	Towers	473
10 86	Security Mirrors and Domes	407	13 42	Building Modules	473
10 88	Scales	407	13 48	Sound, Vibration, and Seismic Control	474
	Equipment		13 49	Radiation Protection	474
11 05	Common Work Results for Equipment	410	13 53	Meteorological Instrumentation	476
11 11	Vehicle Service Equipment	412		Conveying Equipment	
11 12	Parking Control Equipment	412	14 11	Manual Dumbwaiters	478
11 13	Loading Dock Equipment	413	14 12	Electric Dumbwaiters	478
11 14	Pedestrian Control Equipment	414	14 21	Electric Traction Elevators	478
11 21	Retail and Service Equipment	415	14 24	Hydraulic Elevators	479
11 22	Banking Equipment	416	14 27	Custom Elevator Cabs and Doors	480
11 30	Residential Equipment	417	14 28	Elevator Equipment and Controls	481
11 32	Unit Kitchens	420			
11 41	Foodservice Storage Equipment	420	14 31	Escalators	482
11 42	Food Preparation Equipment	422	14 32	Moving Walks	483
11 43	Food Delivery Carts and Conveyors	423	14 42	Wheelchair Lifts	483
11 44	Food Cooking Equipment	423	14 45	Vehicle Lifts	483
			14 91	Facility Chutes	484
			14 92	Pneumatic Tube Systems	484
				Fire Suppression	
			21 05	Common Work Results for Fire Suppression	488
			21 11	Facility Fire-Suppression Water-Service Piping	488
			21 12	Fire-Suppression Standpipes	489
			21 13	Fire-Suppression Sprinkler Systems	490
			21 21	Carbon-Dioxide Fire-Extinguishing Systems	491
			21 22	Clean-Agent Fire-Extinguishing Systems	491
			21 31	Centrifugal Fire Pumps	492
				Plumbing	
			22 01	Operation and Maintenance of Plumbing	494
			22 05	Common Work Results for Plumbing	495
			22 07	Plumbing Insulation	501
			22 11	Facility Water Distribution	502
			22 13	Facility Sanitary Sewerage	510
			22 14	Facility Storm Drainage	512
			22 31	Domestic Water Softeners	514
			22 33	Electric Domestic Water Heaters	514
			22 34	Fuel-Fired Domestic Water Heaters	515
			22 35	Domestic Water Heat Exchangers	516
			22 41	Residential Plumbing Fixtures	516
			22 42	Commercial Plumbing Fixtures	519
			22 45	Emergency Plumbing Fixtures	523
			22 47	Drinking Fountains and Water Coolers	524
			22 51	Swimming Pool Plumbing Systems	525
			22 52	Fountain Plumbing Systems	525
			22 66	Chemical-Waste Systems for Lab. and Healthcare Facilities	526
				Heating Ventilation Air Conditioning	
			23 05	Common Work Results for HVAC	528
			23 07	HVAC Insulation	530
			23 09	Instrumentation and Control for HVAC	531
			23 13	Facility Fuel-Storage Tanks	534
			23 21	Hydronic Piping and Pumps	536
			23 22	Steam and Condensate Piping and Pumps	539
			23 31	HVAC Ducts and Casings	539
			23 33	Air Duct Accessories	541
			23 34	HVAC Fans	543
			23 37	Air Outlets and Inlets	547
			23 38	Ventilation Hoods	549
			23 41	Particulate Air Filtration	550
			23 42	Gas-Phase Air Filtration	550
			23 43	Electronic Air Cleaners	550
			23 51	Breechings, Chimneys, and Stacks	551
			23 52	Heating Boilers	551
			23 54	Furnaces	553
			23 55	Fuel-Fired Heaters	554
			23 56	Solar Energy Heating Equipment	555
			23 57	Heat Exchangers for HVAC	556
			23 62	Packaged Compressor and Condenser Units	557
			23 63	Refrigerant Condensers	557
			23 64	Packaged Water Chillers	557
			23 65	Cooling Towers	559
			23 73	Indoor Central-Station Air-Handling Units	560
			23 74	Packaged Outdoor HVAC Equipment	560
			23 81	Decentralized Unitary HVAC Equipment	561
			23 82	Convection Heating and Cooling Units	562

Table of Contents (cont.)

<i>Sect. No.</i>	<i>Page</i>	<i>Sect. No.</i>	<i>Page</i>	<i>Sect. No.</i>	<i>Page</i>
23 83	Radiant Heating Units	564			
23 84	Humidity Control Equipment	566			
	Electrical				
26 01	Operation and Maintenance of Electrical Systems	588			
26 05	Common Work Results for Electrical	569			
26 09	Instrumentation and Control for Electrical Systems	586			
26 12	Medium-Voltage Transformers	588			
26 22	Low-Voltage Transformers	588			
26 24	Switchboards and Panelboards	589			
26 25	Low-Voltage Enclosed Bus Assemblies	592			
26 27	Low-Voltage Distribution Equipment	593			
26 28	Low-Voltage Circuit Protective Devices	595			
26 29	Low-Voltage Controllers	595			
26 32	Packaged Generator Assemblies	596			
26 33	Battery Equipment	596			
26 35	Power Filters and Conditioners	597			
26 51	Interior Lighting	597			
26 52	Safety Lighting	599			
26 54	Classified Location Lighting	600			
26 55	Special Purpose Lighting	600			
26 56	Exterior Lighting	601			
26 61	Lighting Systems and Accessories	603			
	Communications				
27 13	Communications Backbone Cabling	606			
27 41	Audio-Video Systems	606			
27 51	Distributed Audio-Video Communications Systems	607			
27 52	Healthcare Communications and Monitoring Systems	608			
27 53	Distributed Systems	608			
	Electronic Safety & Security				
28 15	Access Control Hardware Devices ...	610			
28 18	Security Access Detection Equipment	610			
28 23	Video Management System	611			
28 31	Intrusion Detection	611			
28 42	Gas Detection and Alarm	612			
28 46	Fire Detection and Alarm	612			
28 47	Mass Notification	613			
	Earthwork				
31 05	Common Work Results for Earthwork	616			
31 06	Schedules for Earthwork	616			
31 11	Clearing and Grubbing	617			
31 13	Selective Tree and Shrub Removal and Trimming	618			
31 14	Earth Stripping and Stockpiling	619			
31 22	Grading	619			
31 23	Excavation and Fill	620			
31 25	Erosion and Sedimentation Controls	640			
31 31	Soil Treatment	640			
31 32	Soil Stabilization	640			
31 33	Rock Stabilization	641			
31 36	Gabions	641			
31 37	Riprap	641			
31 41	Shoring	642			
31 43	Concrete Raising	643			
31 45	Vibroflotation and Densification	643			
31 46	Needle Beams	643			
31 48	Underpinning	643			
31 52	Cofferdams	644			
31 56	Slurry Walls	644			
31 62	Driven Piles	645			
31 63	Bored Piles	647			
	Exterior Improvements				
32 01	Operation and Maintenance of Exterior Improvements	652			
32 06	Schedules for Exterior Improvements	653			
32 11	Base Courses	653			
32 12	Flexible Paving	654			
32 13	Rigid Paving	656			
32 14	Unit Paving	657			
32 16	Curbs, Gutters, Sidewalks, and Driveways	658			
32 17	Paving Specialties	659			
32 18	Athletic and Recreational Surfacing	661			
32 31	Fences and Gates	662			
32 32	Retaining Walls	666			
32 33	Site Furnishings	668			
32 34	Fabricated Bridges	669			
32 35	Screening Devices	670			
32 84	Planting Irrigation	670			
32 91	Planting Preparation	671			
	Waterway & Marine				
32 92	Turf and Grasses	672			
32 93	Plants	673			
32 94	Planting Accessories	675			
32 96	Transplanting	675			
	Utilities				
33 01	Operation and Maintenance of Utilities	678			
33 05	Common Work Results for Utilities	679			
33 11	Groundwater Sources	681			
33 14	Water Utility Transmission and Distribution	682			
33 16	Water Utility Storage Tanks	684			
33 31	Sanitary Sewerage Piping	685			
33 34	Onsite Wastewater Disposal	686			
33 41	Subdrainage	687			
33 42	Stormwater Conveyance	688			
33 52	Hydrocarbon Transmission and Distribution	691			
33 71	Electrical Utility Transmission and Distribution	692			
33 81	Communications Structures	693			
	Transportation				
34 01	Operation and Maintenance of Transportation	696			
34 11	Rail Tracks	696			
34 41	Roadway Signaling and Control Equipment	697			
34 71	Roadway Construction	697			
34 72	Railway Construction	698			
	Waterway & Marine				
35 24	Dredging	700			
35 51	Floating Construction	700			
	Material Processing & Handling Equipment				
41 21	Conveyors	702			
41 22	Cranes and Hoists	702			
	Water and Wastewater Equipment				
46 07	Packaged Water and Wastewater Treatment Equipment	706			
	Electrical Power Generation				
48 15	Wind Energy Electrical Power Generation Equipment	708			

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	711
Crew Listings	723
Historical Cost Indexes	758
City Cost Indexes	759
Location Factors	802
Reference Tables	808
R01 General Requirements.....	808
R02 Existing Conditions	820
R03 Concrete.....	823
R04 Masonry	838
R05 Metals	840
R06 Wood, Plastics & Composites	847
R07 Thermal & Moisture Protection	847
R08 Openings.....	849
R09 Finishes.....	852
R13 Special Construction	855
R14 Conveying Equipment.....	857

Reference Tables (cont.)

R22 Plumbing	858
R23 Heating, Ventilating & Air Conditioning.....	860
R26 Electrical.....	861
R31 Earthwork	864
R32 Exterior Improvements.....	868
R33 Utilities.....	869
R34 Transportation.....	869
Change Orders	870
Project Costs	873
Abbreviations	878