

# Largest contractors set new volume record

The 400 largest U.S. contractors in 1971 saw an upswing in their new business from 1970's tight volume. Their 1971 contract awards totaled \$36 billion, jumping 11% over a year ago.

Foreign work rebounded fastest with a 22.5% leap to \$4.9 billion. Domestic contracts climbed 9.5%, but marked the second consecutive year that The ENR 400 failed to top the growth rate of the total U.S. construction market excluding homebuilding, which rose 10% last year.

Design and construct contracts shot up 13% from the low 1970 total, topping the previous high of 1969. The \$11.1 billion in new design and construct work awarded in 1971 underscored the recovery of industrial constructors. The 34 industrial constructors among The ENR 400 increased their share of the 400's total from 15% in 1970 to 21% in 1971.

**More concentrated.** Concentration of contract volume tightened within the 400. The top 10% of The ENR 400 accounted for 56% of the total, up from 54% in 1970. And the dollar volume of this upper 10% climbed 15% above 1970's top 40—greater than the overall increase.

More \$100-million contractors are among the 400—63 compared to 52 a year ago, increasing the concentration at the top. The 400 was further squeezed as the minimum contract volume rose 5.5% to \$21.1 million.

These general trends of greater concentration, higher average volume and higher top, have recurred throughout the nine-year history of The ENR 400 with the exception of 1970.

With 313 contractors returning to The ENR 400 that were also listed a year ago, 62% increased their contract volume in 1971. General builders fared the best, with three out of four taking on more new business last year. Two out of three diversified contractors and heavy and highway contractors increased their contract awards in 1971, while three out of five industrial constructors reported a jump.

Joining The ENR 400 in 1971 are 87 contractors that were not listed in 1970. Thirty-one of these 87 are newcomers to The ENR 400 and 56 are returning after a year or more absence.

Among The ENR 400 this year are six of the largest mechanical and electrical contractors. Fischbach & Moore, Howard P. Foley, E.C. Ernst, Scheider, Union Boiler and Architectural & Mechanical Systems Corp. are ranked among the 400 as well as among the top mechanical, electrical contractor listing on p. 47. These six mechanical and electrical contractors are included among The ENR 400 because their prime contracts plus share of joint ventures is higher than the minimum \$21.1-million volume.

**Boise Cascade No. 1.** Boise Cascade heads up The ENR 400 largest U.S. con-

tractors with its \$2.5-billion volume, up from its \$2.1-billion total that was reported too late last year to place Boise Cascade in the No. 1 slot for 1970.

Three industrial constructors are ranked in the top 10 as Stone & Webster jumps to No. 2 and Lummus to No. 7, joining Boise Cascade's Ebasco.

Brown & Root topped Bechtel in 1971 contract awards to land the No. 3 slot. Daniel International and Guy F. Atkinson each dropped one rank from 1970 to hold the No. 5 and 6 positions.

Three general builders fill out the top 10. Turner holds onto the No. 8 rank for the second consecutive year, Carl A. Morse dropped two spots to No. 9 and Tishman joins the top 10 for the first time since 1967.

Missing are Kaiser Engineers, United Engineers and Constructors, and Rust Engineering, all of which dropped out of the top 10 in 1971.

**Growth in foreign market.** The increase in foreign work signed up in 1971 will take even greater numbers of U.S. contractors abroad this year. Currently, 76 members of The ENR 400 are working in 105 foreign countries.

Canada again heads the list of foreign countries that attract U.S. contractors. Thirty-five U.S. contractors now have jobs in Canada—the same number as in 1970. Twenty-six of the 400 are working in Puerto Rico, 19 in Australia, 18 in the United Kingdom and 17 in Germany.

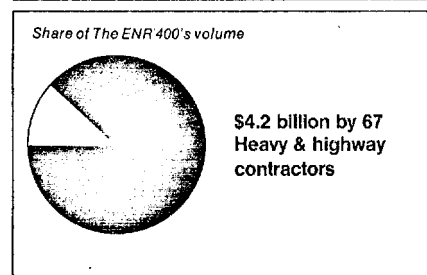
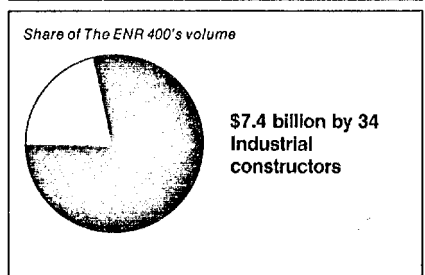
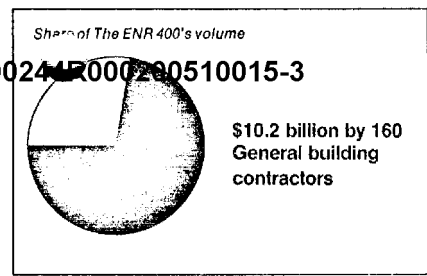
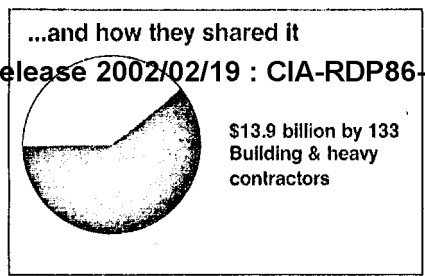
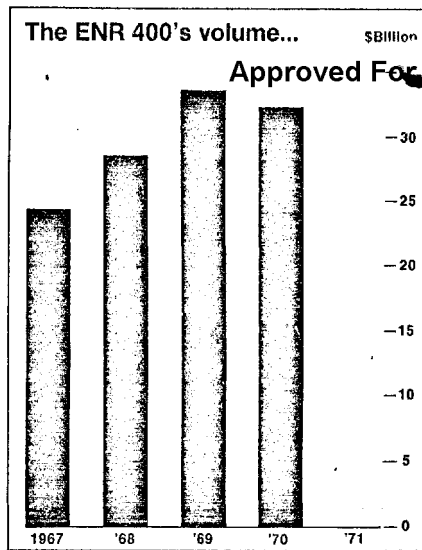
Industrial constructors and diversified contractors that do both heavy and building construction account for the bulk of The ENR 400's foreign contract volume. Fifteen industrial constructors netted 35% of the foreign total with 27 diversified contractors accounting for 47%. Heavy and highway contractors won only \$475 million in foreign jobs in 1971; general builders only \$303 million.

**CM is popular.** Construction management (CM) contracts, like design-only contracts, are excluded from company totals for The ENR 400 roster. Many members of the 400 offer CM services however, and served as CMs on projects in 1971 where other firms (often members of the 400) did the work as prime contractor.

The 78 firms that told ENR they offer

## Diversified contractors score greatest

Contractor type & 1971 dollar volume	Number of companies	Pre-tax profits as a % of stockholders' equity		
		Low %	Median %	High %
<b>Heavy &amp; highway</b>				
\$50 million & up .....	4	10.0	19	40
\$25 mil.-\$49 mil. ....	15	3.0	20	43
\$20 mil.-\$24 mil. ....	9	2.0	13	130
<b>Building &amp; heavy</b>				
\$100 million & up .....	10	6.0	27	97
\$50 mil.-\$99 mil. ....	19	1.5	24	75
\$20 mil.-\$49 mil. ....	28	0.5	23	69
<b>Building</b>				
\$100 million & up .....	11	1.5	21	43
\$50 mil.-\$99 mil. ....	9	2.0	18	153
\$20 mil.-\$49 mil. ....	61	1.0	22	223
<b>Industrial</b>				
\$50 million & up .....	9	3.0	12	37
\$20 mil.-\$49 mil. ....	9	3.0	12	37



CM services say they have done so for a number of years. About half of these 78 firms have offered such services for 10 or more years. Only a handful have just recently added construction management to their list of specialties.

In 1971, 46 of these firms offering CM services were awarded construction management contracts where another firm worked as prime contractor totaling \$2 billion in project value. These CM contracts per firm range from \$250,000 to over \$500 million in construction cost.

Fees for CM services vary widely. One firm reports its standard construction

management fee is 1% of project value, while another claims 10%. The median standard fee is 4%.

Four out of five companies that offer CM services say their fee decreases as project size increases. Standard fees may drop from 5 or 6% to a minimum of 2 or 3% on large projects. The lowest minimum fee reported is 0.5%; the highest, 8%.

In addition to offering CM services, many members of The ENR 400 have been prime contractors on projects that had another firm in the CM role. Nineteen of the 78 firms that offer CM services themselves have also worked as

prime contractors on a CM project. In 1971, 50 members of The ENR 400 worked as prime contractors on projects totaling \$225 million that had another firm in the CM role.

**Widespread profits.** Contractors profits were more abundant in 1971 than a year ago. Nine out of 10 of the 400 report they made a profit in 1971. Only 21 of the 318 firms reporting their 1970-71 profit trend suffered a loss last year. Moreover, of the firms that made profits in both 1970 and '71, two out of three upped their profits in 1971 and eight firms pulled out of the red.

Industrial constructors scored the

## More contractors are now working abroad than in 1971

In these 105 countries . . .

- |                        |                    |                       |
|------------------------|--------------------|-----------------------|
| 1. Africa              | 36. Honduras       | 71. Peru              |
| 2. Algeria             | 37. Hong Kong      | 72. Philippines       |
| 3. Angola              | 38. India          | 73. Poland            |
| 4. Antarctic           | 39. Indonesia      | 74. Puerto Rico       |
| 5. Argentina           | 40. Iran           | 75. Qatar             |
| 6. Aruba               | 41. Iraq           | 76. Rumania           |
| 7. Australia           | 42. Israel         | 77. Russia            |
| 8. Bahrain             | 43. Italy          | 78. S.E. Asia         |
| 9. Bangladesh          | 44. Ivory Coast    | 79. Samoa             |
| 10. Beirut             | 45. Jamaica        | 80. Sardinia          |
| 11. Belgium            | 46. Japan          | 81. Saudi Arabia      |
| 12. Bolivia            | 47. Korea          | 82. Singapore         |
| 13. Botswana           | 48. Kuwait         | 83. South Africa      |
| 14. Brazil             | 49. Kwajalein Isl. | 84. Spain             |
| 15. Brunei             | 50. Labuan Isl.    | 85. Sudan             |
| 16. Canada             | 51. Lebanon        | 86. Sweden            |
| 17. Ceylon             | 52. Liberia        | 87. Taiwan            |
| 18. Chile              | 53. Libya          | 88. Tanzania          |
| 19. Colombia           | 54. Malawi         | 89. Tasmania          |
| 20. Costa Rica         | 55. Malaysia       | 90. Thailand          |
| 21. Czechoslovakia     | 56. Marshall Isl.  | 91. Trinidad          |
| 22. Denmark            | 57. Mauritania     | 92. Trucial States    |
| 23. Dominican Republic | 58. Mexico         | 93. Truk              |
| 24. Ecuador            | 59. Netherlands    | 94. Trust Territories |
| 25. Egypt              | 60. Newfoundland   | 95. Tunisia           |
| 26. El Salvador        | 61. New Guinea     | 96. Turkey            |
| 27. Finland            | 62. New Zealand    | 97. U.K.              |
| 28. France             | 63. Nicaragua      | 98. Uganda            |
| 29. Germany            | 64. Nigeria        | 99. Uruguay           |
| 30. Ghana              | 65. North Sea      | 100. Venezuela        |
| 31. Greece             | 66. Norway         | 101. S. Vietnam       |
| 32. Guam               | 67. Okinawa        | 102. Virgin Isl.      |
| 33. Guatemala          | 68. Pakistan       | 103. West Indies      |
| 34. Guyana             | 69. Panama         | 104. Yemen            |
| 35. Holland            | 70. Paraguay       | 105. Zambia           |

. . . 76 contractors now have jobs

(match country codes with table at left)

- Austin**—5,7,11,16,28,29,39,43,59,84,97 **Ballenger**—20,74 **Bechtel**—4,5,7,11,14,16,17,19,21,27,28,29,38,39,47,53,57,58,61,72,74,83,84,86,87,97,105 **E.E. Black**—32,72,94 **Blaw-Knox**—16,46,100 **Blount Bros.**—45,103 **Blythe Bros.**—74 **Boise Cascade**—2,5,14,16,28,31,38,46,81,84,87,96,99 **C.F. Braun**—16,22,29,35,46,47 **Brown & Root**—3,7,8,13,14,15,16,23,25,33,36,39,40,46,48,50,58,59,64,67,69,70,71,74,75,81,82,83,84,97,100,101,102 **Burgess**—7,89 **Burns & Roe**—7,16,31,38,46,49,58,67,81,84,87,96 **C & C/Bohrer**—7,74 **Catalytic**—11,16,28,29,46,55,83,97 **Centex**—74 **Cunningham-Limp**—11,16,29,74,84 **Daniel**—11,23,29,74,97,102 **Day & Zimmermann**—33 **Delta**—5,16 **Dillingham**—7,16,32,47,61,62,64,82,94 **Dravo**—2,5,7,16,28,29,33,52,96,100 **Eichleay**—16 **Fischbach & Moore**—16,29,45,63,74,83,90,101 **Fluor**—7,16,47,71,82,83,97,100 **Ford**, **Bacon & Davis**—14,36,38,72,74,91 **Franchi**—51,95 **Fuller**—58,74 **Edward J. Gerrits**—74,102 **Great Lakes**—6 **HRH**—74 **Harbert**—20,24,45 **Nat Harrison**—33,74 **Hawall Corp.**—32 **Houston**—24,91 **Jacobs**—16,26,42,58,74,79,97 **J.A. Jones**—12,19,74,101 **Kaiser**—5,7,14,16,30,39,44,45,74,80,90,103 **M.W. Kellogg**—14,16,18,29,38,39,46,47,51,74,76,77,97,100 **Peter Kiewit**—16 **C.H. Leavell**—52,85 **Lummus**—2,5,12,14,16,18,27,28,29,40,43,46,47,58,59,72,74,77,83,87,96,97,100 **J. Ray McDermott**—7,14,16,40,64,65,81,82,91 **Arthur G. McKee**—1,5,6,7,11,14,16,18,28,29,38,43,58,84,86,96,100,104 **McKinley**—73 **Morrison-Knudsen**—5,7,14,16,19,23,28,34,39,40,47,59,61,68,87,95,97,100 **Carl A. Morse**—16,28 **Mosser**—102 **Oman**—7 **Ralph M. Parsons**—1,7,16,29,46,58,69,72,78,87,97 **Perini**—16,68 **Pizzagalli**—102 **R.B. Potashnick**—26,74 **H.C. Price**—7,10,16,28,29,35,40,48,82,97 **J.F. Pritchard**—2,9,16,40,72,77,100 **Procon**—7,11,14,15,16,28,29,46,47,59,60,74,84,90,97 **Ramada**—11,29 **Raymond**—43,45,52,53,64,74,91,97,98,100,101 **F.D. Rich**—74 **Rust**—11,16,19,28,29,47,58,97,100 **Sanderson & Porter**—14,39,40,52,74,81,97,101 **Santa Fe Engineers**—47 **Santa Fe Pomeroy**—7,16,39,40,41,48,58,64,66,75,81,82,92 **Scientific Design**—11,14,38,43,46,58,76,84,97 **Stearns-Roger**—16,42 **Stolle**—82 **Nello L. Teer**—33,36,54,63,88 **Turner**—37 **U.S. Industries**—14 **Vinnell**—32,58,68,72,82,101 **Warren Bros.**—16,84 **Del E. Webb**—26,36 **Foster Wheeler**—7,14,16,28,29,43,44,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101,102,103,104,105 **Zurn**—24,47,63,93

best profit record, with only one out of 26 operating in the red. General builders and heavy and highway contractors could not match the profit record of the industrial constructors, but fared better than diversified contractors. About one out of 16 general builders and heavy and highway contractors reported a loss in 1971, while 10% of contractors doing both heavy and building construction ran into the red ink.

Bucking the trend set in previous years, losses hit hardest among the \$25 million to \$49-million contractors. Generally, contractors with less than \$25-million contract volume most often run into the red. But in 1971, seven of the eight general builders that reported a loss have \$25 million to \$49 million in contract awards. Five of the nine heavy and building contractors that operated in the red last year were among that group and three other diversified contractors with losses reported a contract volume over \$50 million.

Pretax profit margins on stockholders' equity in the business were greater than in 1970 for all types and sizes of contractors except for the following classifications: large general builders and small to medium size heavy and highway contractors.

Diversified contractors working on both heavy and building projects reported the greatest margin on equity in 1971, while a year ago they had the smallest. Conversely, \$100-million general builders saw their margins drop from a median of 30% on equity in 1970 to 21% in 1971.

Large industrial constructors had the second best record and the tightest range of profit margins. These industrial constructors, with more than \$50 million in contract awards, reported pretax margins ranging from 17 to 53% of equity with a median occurring at 25%.

With 179 contractors reporting, profit margins as a percent of tangible net worth ranged from half of 1% to over 200% before taxes. Twenty-nine firms made 5% or less of a return on investment before taxes and 14 of them are general builders.

**Equipment investment up.** Lead by heavy and highway contractors, members of The ENR 400 have a considerable investment in construction machinery and trucks valued at current replacement cost.

Large heavy and highway contractors, with over \$50 million in 1971 contract awards, have a median investment of \$383,000 per \$1 million of contracts. Those in the \$25 million to

## Top electrical & mechanical contractors

1971 contracts  
in \$ millions  
Total Foreign (Mechanical) (Electrical)

	Total	Foreign	(Mechanical)	(Electrical)
1. Fischbach & Moore, New York, N.Y. ....	258.2	29.5	✓	✓
2. Sam P. Wallace Co., Inc., Dallas, Tex. ....	98.5	21.1	✓	✓
3. Howard P. Foley Co., Washington, D.C. ....	96.0	0	..	✓
4. Amelco Corp., Honolulu, Haw. ....	88.6	24.7	..	✓
5. Natkin & Co., Omaha, Neb. ....	82.4	0	✓	..
6. E.C. Ernst, Inc., Washington, D.C. ....	80.0	0	✓	✓
7. Limbach Co., Pittsburgh, Pa. ....	68.9	0	✓	..
8. Lord Electric Co., Inc., New York, N.Y. ....	58.5	n.r.	..	✓
9. Poole & Kent Co., Baltimore, Md. ....	43.3†	0	✓	..
10. Schneider, Inc., Pittsburgh, Pa. ....	41.0	0	✓	..
11. Continental Mechanical Corp., Dallas, Tex. ....	38.7	0	✓	..
12. Riggs & Distler & Co., Inc., Baltimore, Md. ....	38.5	0	✓	✓
13. Union Boiler Co., Inc., Nitro, W. Va. ....	35.9	0	✓	..
14. Broyles & Broyles, Inc., Ft. Worth, Tex. ....	35.3	0	✓	..
15. University Mech. Engrg. & Const., San Diego .....	35.0	0	✓	..
16. Economy Mechanical Ind., Skokie, Ill. ....	32.0†	0	✓	..
17. Arch. & Mech. Systems Corp., Champaign, Ill. ....	27.7	0	✓	✓
18. Courter & Co., Inc., New York, N.Y. ....	22.3	0	✓	..
19. Tibbetts Plumbing & Heating, Anderson, Ind. ....	22.1	0	✓	..

†percent completion basis \*mechanical in Puerto Rico only

## \$1.2 billion awarded to top specialty contractors

Top U.S. mechanical and electrical contractors, which often work with and compete against members of The ENR 400, are introduced in the listing above. These 19 leading mechanical and electrical contractors took on \$1.2 billion in 1971 contract awards.

Company totals included prime contracts in the U.S., share of joint ventures, subcontracts and foreign work. The minimum volume of \$22.1 million corresponds to the minimum volume of The ENR 400.

Six of these top mechanical and electrical contractors are also listed among The ENR 400 because their contract volume, excluding subcontracts, is higher than the minimum volume of the 400. Their rank among the 400 is determined by their total contract volume in 1971, including subcontracts. For many of the other 13 mechanical and electrical contractors, subcontracts awarded to them by other prime contractors often account for the bulk of their new business.

Fischbach & Moore, ranked No. 27 among The ENR 400, leads the list of top mechanical and electrical contractors with its \$258.2-million volume, which is 162% higher than its closest competitor.

Eleven mechanical, three electrical, and five contractors handling both mechanical and electrical construction, are included. The five contractors doing both mechanical and electrical work account for the largest share of the total, 42%, with 11 mechanical contractors accounting for 38% and three electrical contractors netting 20% of the \$1.2-billion total.

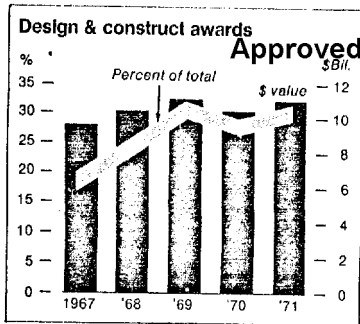
**Five working abroad.** While only three of the 19 top mechanical and electrical contractors reported their 1971 foreign contract awards totaling \$75 million, five firms report they are currently working in 17 foreign countries. Fischbach & Moore leads with current jobs in eight foreign countries, Amelco is working in six, Sam P. Wallace in three and Lord Electric and Poole & Kent in one each. Jobs these five firms now have overseas are in Australia, Bermuda, Canada, France, Germany, Guam, Guyana, Jamaica, Nicaragua, the Philippines, Puerto Rico, Somaliland, South Africa, Thailand, U.S. Trust Territories, South Vietnam and the Virgin Islands.

Design work is included among the construction specialties of five top mechanical and electrical contractors. Sam P. Wallace, Broyles & Broyles and Architectural & Mechanical Systems Corp. reported about \$50 million total in new design and construct work awarded to them in 1971.

**High margins on equity.** Ten of the leading mechanical and electrical contractors reporting their 1970-71 profit trend made a profit in 1971. Only one mechanical contractor and one mechanical and electrical contractor reported a loss.

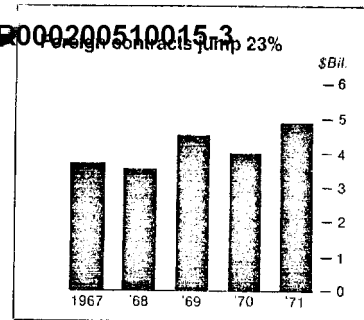
Two out of three of the profit-makers reported higher pretax profits in 1971 than in 1970. Jumps ranged from 2 to 214% with a 12% median increase.

Design work is included among the construction specialties of five top mechanical and electrical contractors. Sam P. Wallace, Broyles & Broyles and Architectural & Mechanical Systems Corp. reported about \$50 million total in new design and construct work awarded to them in 1971.



According to contract awards. Those firms building contract awards reported a median new investment of \$12,400 per \$1 million of contracts, while smaller diversified contractors invested a median \$7,100 per million of awards.

New investment in construction machinery and trucks by general builders and industrial constructors was highest among the \$20 million to \$49-million contract volume group. General builders of that size had a median new investment of \$2,000 per \$1 million of contracts, while their larger counterparts halved that figure. Medium size



\$49-million bracket invest a median of \$376,000 per \$1 million of contracts and smaller heavy and highway contractors invest a median \$221,000 per \$1 million of contract awards.

This substantial investment in machinery and trucks compares to builders with \$100 million or more contract volume that have a median investment of only \$5,200 per \$1 million of contracts; large industrial constructors with a \$26,700-median investment per \$1 million of contracts; and large diversified contractors with a median of \$49,300 invested per \$1 million of awards.

Investment varies by size of contractor as well as by type and for every type of contractor other than heavy and highway contractors, firms with a 1971 contract volume between \$25 million and \$49 million have a higher median investment in machinery and trucks than their larger counterparts.

For general builders in the \$20 million to \$49-million group, median investment in machinery and trucks is \$13,800 per \$1 million of contracts; for industrial constructors, \$47,800; and for \$25 million to \$49-million diversified contractors, \$63,400 per \$1 million of contracts.

The lowest investment in construction machinery per \$1 million of contracts is \$700 by a large general builder and the highest is \$3.3 million, or triple 1971 contract volume, for a heavy and highway contractor.

Machinery and truck purchases in 1971 tended to fall below those reported in 1970. The median new investment of \$43,000 per \$1 million of contracts for heavy and highway contractors dropped 19% below a year ago. However, smaller heavy and highway contractors with a \$20 million to \$24-million contract volume had a median new investment of \$41,600 per \$1 million of contracts, sharply higher than their 1970 median new investment of \$27,000 per \$1 million of awards.

Among diversified contractors, 1971 machinery and truck purchases rose ac-

industrial constructors had a \$5,200 median new investment per million of contract.

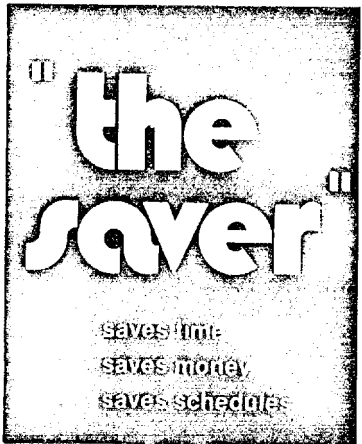
## THE ENR 400

	1971 contracts		Heavy	Construction specialty				
	Total	Foreign		Highway	Gen'l build-ings	Mfg., process plants	Do design	Do CM
1. Boise Cascade Engineering & Const. New York (a) 2,522.0 1,393.0	✓	✓	✓	✓	✓	✓	✓	
2. Stone & Webster Engineering Corp., Boston 2,100.0* n.r.	✓	✓	✓	✓	✓	✓	✓	
3. Brown & Root, Inc., Houston, Tex. 1,491.5 327.2	✓	✓	✓	✓	✓	✓	✓	
4. Bechtel Corp., San Francisco, Calif. 1,284.0 14.0	✓	✓	✓	✓	✓	✓	✓	
5. Daniel International Corp., Greenville, S. C. 888.0 107.4	✓	✓	✓	✓	✓	✓	✓	
6. Guy F. Atkinson Co., South San Francisco, Calif. (b) 689.6 66.3	✓	✓	✓	✓	✓	✓	✓	
7. The Lummus Co., New York, N. Y. 625.0 400.0	✓	✓	✓	✓	✓	✓	✓	
8. Turner Const. Co., New York, N. Y. 501.8 25.5	✓	✓	✓	✓	✓	✓	✓	
9. Carl A. Morse, Inc., New York, N. Y. 497.7 0	✓	✓	✓	✓	✓	✓	✓	
10. Tishman Realty & Const. Co., New York, N. Y. 472.2 0	✓	✓	✓	✓	✓	✓	✓	
11. Foster Wheeler Corp., Livingston, N. J. 468.0 189.0	✓	✓	✓	✓	✓	✓	✓	
12. C. F. Braun & Co., Alhambra, Calif. 440.0 150.0	✓	✓	✓	✓	✓	✓	✓	
13. United Engineers & Constructors, Inc., Philadelphia, Pa. 437.0 0	✓	✓	✓	✓	✓	✓	✓	
14. The M. W. Kellogg Co., Houston, Tex. 400.0 n.r.	✓	✓	✓	✓	✓	✓	✓	
15. Chicago Bridge & Iron Co., Oak Brook, Ill. 394.0 n.r.	✓	✓	✓	✓	✓	✓	✓	
16. Morrison-Knudsen Co., Inc., Boise, Idaho 392.1 119.4	✓	✓	✓	✓	✓	✓	✓	
17. Peter Kiewit Sons' Co., Omaha, Neb. 377.6 61.4	✓	✓	✓	✓	✓	✓	✓	
18. Arthur G. McKee & Co., Cleveland, Ohio 362.6 184.4	✓	✓	✓	✓	✓	✓	✓	
19. The Rust Engineering Co., Birmingham, Ala. 350.0 190.0	✓	✓	✓	✓	✓	✓	✓	
20. J. Ray McDermott & Co., Inc., New Orleans, La. 346.0 n.r.	✓	✓	✓	✓	✓	✓	✓	
21. Kaiser Engineers Div., Kaiser Ind., Oakland, Calif. 345.2 119.3	✓	✓	✓	✓	✓	✓	✓	
22. J. A. Jones Const. Co., Charlotte, N. C. (c) 333.4 43.9	✓	✓	✓	✓	✓	✓	✓	
23. The Austin Co., Cleveland, Ohio 315.1 96.7	✓	✓	✓	✓	✓	✓	✓	
24. Warren Brothers Co., Cambridge, Mass. 294.7 35.1	✓	✓	✓	✓	✓	✓	✓	
25. Fluor Corp., Los Angeles, Calif. 285.0 245.0	✓	✓	✓	✓	✓	✓	✓	
26. Dillingham Corp., Honolulu, Hawaii (d) 284.3 46.4	✓	✓	✓	✓	✓	✓	✓	
27. Fischbach & Moore, New York, N. Y. 258.2 29.5	✓	✓	✓	✓	✓	✓	✓	
28. The Badger Co., Inc., Cambridge, Mass. 255.0 165.0	✓	✓	✓	✓	✓	✓	✓	
29. The Ralph M. Parsons Co., Los Angeles, Calif. 249.0 120.0	✓	✓	✓	✓	✓	✓	✓	
30. Huber, Hunt & Nichols, Inc., Indianapolis, Ind. 239.0 0	✓	✓	✓	✓	✓	✓	✓	
31. Centex Corp.-J. W. Bateson Co., Inc., Dallas 229.5 14.2	✓	✓	✓	✓	✓	✓	✓	
32. Dravo Corp., Pittsburgh, Pa. 220.8 31.2	✓	✓	✓	✓	✓	✓	✓	
33. Blount Bros. Corp., Montgomery, Ala. 220.4 5.6	✓	✓	✓	✓	✓	✓	✓	
34. Gilbane Building Co., Providence, R. I. 219.4 0	✓	✓	✓	✓	✓	✓	✓	
35. Procon, Inc., Des Plaines, Ill. 215.9 28.4	✓	✓	✓	✓	✓	✓	✓	
36. S. J. Groves & Sons Co., Minneapolis, Minn. 201.3 0	✓	✓	✓	✓	✓	✓	✓	
37. Henry C. Beck Co., Dallas, Tex. 200.7 0	✓	✓	✓	✓	✓	✓	✓	
38. Perini Corp., Framingham, Mass. 189.7 29.9	✓	✓	✓	✓	✓	✓	✓	
39. Gust K. Newberg Const. Co., Chicago, Ill. 180.4 0	✓	✓	✓	✓	✓	✓	✓	
40. H. B. Zachry Co., San Antonio, Tex. 164.3 28.7	✓	✓	✓	✓	✓	✓	✓	
41. Frank Briscoe Co., Inc., Newark, N. J. 153.0 0	✓	✓	✓	✓	✓	✓	✓	
42. Darin & Armstrong, Inc., Detroit, Mich. 152.0 0	✓	✓	✓	✓	✓	✓	✓	
43. Stearns-Roger Corp., Denver, Colo. 151.2 42.0	✓	✓	✓	✓	✓	✓	✓	
44. Raymond International, Inc., New York, N. Y. 150.2 59.8	✓	✓	✓	✓	✓	✓	✓	
45. HRH Const. Corp., New York, N. Y. 142.2 12.5	✓	✓	✓	✓	✓	✓	✓	
46. B & W Const. Co., Barberton, Ohio 142.2 0	✓	✓	✓	✓	✓	✓	✓	
47. The Edw. J. De Bartolo Cos., Youngstown, Ohio 139.9 0	✓	✓	✓	✓	✓	✓	✓	
48. Donovan Const. Co., St. Paul, Minn. 138.3 0	✓	✓	✓	✓	✓	✓	✓	
49. Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa. 138.0 0.3	✓	✓	✓	✓	✓	✓	✓	
50. Ernest W. Hahn, Inc., Hawthorne, Calif. 137.4 0	✓	✓	✓	✓	✓	✓	✓	

Figures include prime construction contracts, shares of joint ventures and subcontracts. Parent company's total includes subsidiaries. Design-construct contracts included at erected value of plant including heavy installed equipment. \* ENR-reported. Excludes joint ventures, subcontracts, projects outside the U.S. (a) Includes Wm. L. Crow Const. Co., Chas. H. Tompkins Co., Rea Const. Co. (b) Includes Walsh Const. Co. (c) Includes Wm. L. Crow Const. Co., Chas. H. Tompkins Co., Rea Const. Co. (d) Includes Hawaiian Dredging & Const. Co., Gordon H. Ball, Inc. and The Wm. Simpson Const. Co.

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THE  
**ENR**

400 continued

	1971 contracts		Construction specialty				
	Total	Foreign	Heavy	High-way	Gen'l build-ings	Mfg. process plants	Do design
51. J. F. Pritchard & Co., Kansas City, Mo.....	134.6	106.6	✓	..	..	✓	✓
52. Conforti & Eiselo, Inc., New York, N. Y.....	129.5	0	..	..	✓	..	..
53. George Hyman Const. Co., Bethesda, Md.....	128.6	0	..	..	✓	..	..
54. Swinerton & Walberg Co., San Francisco, Calif.....	124.7	0	..	..	✓	..	..
55. George A. Fuller Co., New York, N. Y.....	112.5	0	✓	..	✓	✓	..
56. Fruin-Colnon Contg. Co., St. Louis, Mo.....	109.4	0	✓	✓	✓	✓	✓
57. Dick Corp., Pittsburgh, Pa.....	107.4	0	✓	✓	✓	✓	✓
58. Catalytic, Inc., Philadelphia, Pa.....	105.0	42.0	✓	..	✓	✓	..
59. Tidewater Const. Corp., Norfolk, Va.....	103.0	0	✓	✓	..	✓	..
60. Frank J. Rooney, Inc., Miami, Fla.....	103.0	0	✓	✓	✓	..	..
61. Hensel Phelps Const. Co., Greeley, Colo.....	103.0	0	✓	✓	✓	✓	..
62. Ragnar Benson, Inc., Chicago, Ill.....	102.5	0	✓	✓	✓	✓	✓
63. Blake Const. Co., Inc., Washington, D. C.....	101.7	0	✓	..	✓	✓	..
64. Paramount Warrior, Inc., Paramount, Calif..... (e)	100.9	0	..	..	✓	✓	✓
65. Manhallan Const. Co., Muskogee, Okla.....	100.4	0	✓	..	✓	✓	..
66. Starrett Bros. & Eken, Inc., New York, N. Y.....	96.8*	n.r.	..	..	✓	✓	..
67. Howard P. Foley Co., Washington, D. C.....	96.0	0	..	(Electrical)	..	..	..
68. Donald M. Drake Co., Portland, Ore.....	94.1	0	..	✓	..	..	..
69. Leon D. DeMatteis & Sons, Elmont, N. Y.....	93.6	0	..	✓	✓	..	..
70. C. L. Peck Contractor, Los Angeles, Calif.....	87.2	0	..	✓	✓	..	..
71. Horn Const. Co., Inc., Merrick, N. Y.....	86.4	0	✓	✓	✓	..	..
72. Zurn Engineers, Upland, Calif.....	85.6	3.6	✓	✓	✓	✓	..
73. U. S. Industries, Inc., Dallas, Tex..... (f)	85.2	0	✓	✓	✓	✓	✓
74. Townsend & Bottum, Inc., Ann Arbor, Mich.....	85.0	0	✓	✓	✓	✓	..
75. Yeargin Const. Co., Inc., Greenville, S. C.....	83.5	0	✓	..	✓	✓	✓
76. Dirwiddie Const. Co., Inc., San Francisco, Calif.....	83.0	0	..	..	✓	✓	..
77. T. L. James & Co., Inc., Ruston, La.....	82.6	0	✓	✓	✓	..	..
78. Robert E. McKee, Inc., El Paso, Tex.....	82.2	0	..	..	✓	✓	..
79. Hardaway Contg. Co., Columbus, Ga..... (g)	81.0	0	✓	✓	..	✓	..
80. Howard S. Wright Const. Co., Seattle, Wash.....	80.4	34.6	✓	..	✓	✓	..
81. E. C. Ernst, Inc., Washington, D. C.....	80.0	0	..	(Mechanical, electrical)	..	..	..
82. Wismer & Becker, Sacramento, Calif.....	79.4	0	✓	..	..	✓	..
83. W. S. Bellows Const. Corp., Houston Tex.....	78.7	0	..	..	✓	✓	..
84. The Auchter Co., Jacksonville, Fla.....	78.0	0	✓	..	✓	✓	..
85. Mars Assoc., Inc. & Normel Const. Corp., New Rochelle, N. Y.....	77.1	0	..	..	✓	..	..
86. The McKinley Co., Chicago, Ill.....	76.3	8.5	..	..	✓	✓	✓
87. Henry A. Knott Co., Div. of Knott Industries, Inc., Baltimore, Md.....	76.2	0	✓	..	✓	✓	✓
88. James McHugh Const. Co., Chicago, Ill.....	76.1	0	✓	..	✓	..	..
89. Austin Bridge Co., Dallas, Tex.....	75.7	0	✓	✓	✓	✓	..
90. Ira H. Hardin Co., Atlanta, Ga.....	73.8	0	..	..	✓	✓	..
91. H. A. Lott, Inc., Houston, Tex.....	73.6	0	..	..	✓	..	..
92. Vappi & Co., Inc., Cambridge, Mass.....	72.8	0	..	..	✓	✓	..
93. Edward L. Nezelek, Inc., Johnson City, N. Y.....	72.3	0	..	..	✓	✓	..
94. Ruscon Const. Co., Charleston, S. C.....	72.2	0	✓	✓	✓	✓	..
95. Sandersoh & Porter, Inc., New York, N. Y.....	72.0	50.0	✓	..	..	✓	✓
96. Schiavone Const. Co., Secaucus, N. J.....	71.8	0	✓	✓	..	..	..
97. Santa Fe-Pomeroy, Inc., Orange, Calif.....	71.5	48.5	✓	..	..	..	✓
98. C & C/Bohrer, Inc., Fort Wayne, Ind.....	70.2	4.0	✓	..	..	..	..
99. F. D. Rich Co., Inc., Stamford, Conn.....	69.3	5.8	..	..	..	..	..
100. Cauldwell-Wingate Co., Inc., New York, N. Y.....	69.0	0	..	..	✓	..	..
101. Pittman Const. Co., Inc., New Orleans, La.....	68.5	0	✓	✓	✓	✓	✓
102. M. M. Sundt Const. Co., Tucson, Ariz.....	68.1	0	✓	✓	✓	✓	✓
103. Shelter Corp. of America, Inc., Minneapolis, Minn. (h)	67.9	0	..	..	✓	✓	✓
104. Del E. Webb Corp., Phoenix, Ariz.....	67.7	0	..	..	✓	..	..
105. Barton-Malow Co., Detroit, Mich.....	66.4	0	✓	..	✓	✓	..
106. J. M. Foster, Inc., Gary, Ind.....	65.9	0	✓	✓	..	✓	..
107. Dahlstrom Corp., Dallas, Tex.....	65.6	0	✓	✓	..	..	..
108. Ballenger Corp., Greenville, S. C.....	65.0	16.0	✓	✓	..	..	..
109. Haas & Haynie, South San Francisco, Calif.....	64.0	0	..	..	✓	✓	..
110. Sully-Miller Contg. Co., Long Beach, Calif.....	63.9	0	✓	✓	..	..	..
111. Aberthaw Const. Co., Boston, Mass.....	63.4	0	..	..	✓	..	✓
112. The Whiting-Turner Contg. Co., Baltimore, Md.....	63.0	0	..	..	✓	✓	..
113. Daniel J. Keating Co., Philadelphia, Pa.....	63.0	0	✓	..	✓	✓	..
114. Fontaine Bros., Springfield, Mass.....	62.7	0	..	..	✓	✓	..
115. Slattery Associates, Inc., Maspeth, N. Y..... (i)	61.8	0	✓	✓	..	✓	✓
116. Goodnor Const. Co., Long Island City, N. Y.....	60.0	0	..	..	✓	..	..
117. The Hannan Const. Co., Cleveland, Ohio.....	59.1	0	..	..	✓	✓	✓
118. Blaw-Knox Chemical Plants, Pittsburgh, Pa.....	59.0	3.0	..	..	✓	✓	✓
119. Volpe Const. Co., Inc., Malden, Mass.....	58.6	0	..	..	✓	..	..
120. McDewitt & Street Co., Charlotte, N. C.....	58.6	0	..	..	✓	✓	✓
121. The Taubman Co., Southfield, Mich.....	57.3	0	..	..	✓	✓	..
122. Bank Building & Equipment Corp., St. Louis, Mo.....	57.0	0	..	..	✓	..	..
123. Holloway Const. Co., Wixom, Mich.....	56.8	0	✓	✓	..	✓	..
124. Ford Bacon & Davis, Monroe, La.....	55.4	0	✓	..	..	✓	✓
125. Sullivan, Long & Hagerty, Inc., Birmingham, Ala.....	55.3	0	✓	..	..	✓	..

Figures include prime construction contracts, shares of joint ventures and subcontracts. Parent company's total includes subsidiaries. Design-construct contracts included at erected value of plant include heavy installed equipment. \* ENR-reported. Excludes joint ventures, subcontracts, projects outside U.S.

f. Includes Con-Plex, A & S Steel Bldgs., Inc., P & Z Co., Inc., Diversacon g. Includes Wright Contg. Co.  
 h. Formerly listed as Bor-Son Const., Inc. i. Includes H. Sand & Co.

**400 continued**

	1971 contracts in \$ millions			Construction specialty				
	Total	Foreign	Heavy	High- way	Gen'l build- ings	Mfg., process plants	Do design	Do CM
126. Savoy Const. Co., Inc., Silver Spring, Md.	55.2	0	..	..	✓	✓	..	..
127. P. J. Carlin Const. Co., New Rochelle, N. Y.	55.1	0	..	..	✓	..	..	..
128. Jelero Const. Co., Houston, Tex.	55.0	0	..	..	✓	..	..	..
129. H. C. Price Co., Bartlesville, Okla.	55.0	20.0	✓	..	..	..	..	..
130. J. S. Alberici Const. Co., Inc., St. Louis, Mo.	54.7	0	✓	..	✓	✓	..	..
131. Mellon-Stuart Co., Pittsburgh, Pa.	54.4	0	✓	..	✓	✓	..	✓
132. Shapell Industries, Inc., Beverly Hills, Calif.	54.3	0	..	..	✓	..	..	..
133. Batson-Cook Co., West Point, Ga.	53.8	0	..	..	✓	..	..	..
134. Boh Bros. Const. Co., Inc., New Orleans, La.	53.8	0	✓	✓	✓	✓	✓	..
135. J. B. Allen & Co., Anaheim, Calif.	53.0	0	..	..	✓	✓	..	..
136. Granite Const. Co., Watsonville, Calif.	52.1	0	✓	✓	✓	✓	..	..
137. Dwight Building Co., New Haven, Conn.	52.0	0	..	..	✓	✓	..	..
138. The Arundel Corp., Baltimore, Md.	51.9	0	✓	..	..	..	..	..
139. Corbetta Const. Co., Inc., New York, N.Y.	51.5	0	✓	..	..	..	..	✓
140. Nello L. Teer Co., Durham, N.C.	51.4	12.3	✓	✓	✓	✓	..	✓
141. Dickerson, Inc., Monroe, N.C.	51.1	0	✓	✓	✓	✓	..	..
142. Algernon Blair, Inc., Montgomery, Ala.	50.2	0	..	..	✓	✓	✓	✓
143. Castagna & Son, Inc., Manhasset, N. Y.	50.0	0	..	..	✓	✓	..	..
144. Scientific Design Co., Inc., New York, N. Y.	50.0	n.r.	..	..	✓	✓	✓	✓
145. Miller-Davis Co., Kalamazoo, Mich.	49.8	0	✓	..	✓	✓	✓	..
146. Williams & Burrows, Inc., Belmont, Calif.	49.6	0	..	..	✓	✓	✓	..
147. McCloskey & Co., Inc., Philadelphia, Pa.	49.5	0	..	..	✓	✓	✓	..
148. Baltimore Contractors, Inc., Baltimore, Md.	49.5	0	✓	..	✓	✓	✓	✓
149. Cahill Const. Co., Inc., San Francisco, Calif.	49.3	0	..	..	✓	..	..	..
150. Paschen Contractors, Inc., Chicago, Ill.	49.3	0	✓	..	✓	✓	..	..
151. Blythe Brothers Co., Charlotte, N. C.	48.9	14.1	✓	✓	✓	✓	..	..
152. Kraus-Anderson, Inc., Minneapolis, Minn.	48.8	0	..	..	✓	✓	✓	..
153. George B. H. Macomber Co., Boston, Mass.	48.5	0	..	..	✓	✓	✓	..
154. Cunningham-Limp Co., Birmingham, Mich.	48.0	5.0	..	..	✓	✓	✓	..
155. Siegfried Const. Co., Inc., Buffalo, N. Y.	47.6	0	..	..	✓	✓	✓	..
156. Crawford & Russell, Inc., Stamford, Conn.	47.5	0	..	..	✓	✓	✓	..
157. The Lathrop Co., Toledo, Ohio	46.8	0	✓	✓	✓	✓	✓	..
158. Vinnell Corp., Alhambra, Calif.	46.7	28.4	✓	✓	✓	✓	✓	..
159. Hunt Building Corp., El Paso, Tex.	46.3	0	..	..	✓	✓	✓	..
160. Martin & Nefrou Contg. Co., Pittsburgh, Pa.	45.9	0	..	..	✓	✓	✓	✓
161. Yaksh Builders, Inc., Atlanta, Ga.	45.7	6.1	..	..	✓	✓	..	..
162. Albert Elia Bldg. Co., Inc., Niagara Falls, N. Y.	45.4	0	✓	✓	✓	✓	✓	✓
163. Wigton-Abbott Corp., Plainfield, N. J.	45.2	0	..	..	✓	✓	✓	✓
164. Bethlehem Steel Corp., Bethlehem, Pa.	45.0	0	✓	✓	✓	✓	✓	..
165. Hoffman Const. Co., Portland, Ore.	44.9	0	✓	..	✓	✓	✓	..
166. Morley Const. Co., Los Angeles, Calif.	44.6	0	..	..	✓	✓	✓	..
167. A. Teichert & Son, Inc., Sacramento, Calif.	44.3	0	✓	✓	✓	✓	✓	..
168. W. E. O'Neil Const. Co., Chicago, Ill.	44.0	0	✓	..	✓	✓	✓	✓
169. Stolte, Inc., Oakland, Calif.	43.8	8.0	✓	✓	✓	✓	✓	..
170. Peabody Const. Co., Inc., Braintree, Mass.	43.8	0	..	..	✓	✓	✓	..
171. M. J. Brock & Sons, Inc., Los Angeles, Calif.	43.0	0	..	..	✓	✓	✓	..
172. Crane Const. Co., Chicago, Ill.	43.0	0	..	..	✓	✓	✓	..
173. Ramada Development Co., Phoenix, Ariz.	43.0	4.0	..	..	✓	✓	✓	..
174. Rothschild & Rafkin, Inc., San Francisco, Calif.	43.0	0	✓	..	✓	✓	✓	..
175. Leonard Shaffer Assoc., Inc., Philadelphia, Pa.	42.7*	n.r.	..	..	✓	✓	✓	..
176. Wiggs & Maale Const. Co., W. Palm Beach, Fla.	42.3	0	..	..	✓	✓	✓	..
177. Irwin & Leighton, Inc., Philadelphia, Pa.	42.3	0	..	..	✓	✓	✓	..
178. Morrison Const. Co., Hammond, Ind.	42.3	0	✓	..	✓	✓	✓	..
179. M. B. Kahn Const. Co., Columbia, S. C.	42.2	0	..	..	✓	✓	✓	..
180. D. W. Winkelman Co., Inc., Syracuse, N. Y.	42.1	0	✓	✓	✓	✓	✓	..
181. F. P. Lathrop Const. Co., Berkeley, Calif.	42.0	0	..	..	✓	✓	✓	..
182. Universal Const. Co., Kansas City, Kan.	41.9	0	✓	..	✓	✓	✓	✓
183. Gotham Const. No. II, Inc., New York, N. Y.	41.8	0	..	..	✓	✓	✓	✓
184. Edward J. Gerrits, Miami, Fla.	41.6	18.7	..	..	✓	✓	✓	..
185. Kummer Corp., St. Louis, Mo.	41.5	0	..	..	✓	✓	✓	..
186. B. G. Danis Co., Inc., Dayton, Ohio	41.5	0	✓	✓	✓	✓	✓	..
187. C. H. Leavell & Co., El Paso, Tex.	41.3	0	✓	..	✓	✓	✓	..
188. Pickens-Bond Const. Co., Little Rock, Ark.	41.2	0	..	..	✓	✓	✓	..
189. Schneider, Inc., Pittsburgh, Pa.	41.1	0	..	(Mechanical)	✓	✓	✓	..
190. Doyle & Russell, Inc., Richmond, Va.	41.0	0	..	..	✓	✓	✓	..
191. Frank Messer & Sons, Inc., Cincinnati, Ohio	41.0	0	..	..	✓	✓	✓	..
192. F. W. Eversley & Co., Inc., New York, N. Y.	40.9	0	..	..	✓	✓	✓	..
193. Mosser Const. Co., Inc., Fremont, Ohio	40.6	1.9	✓	✓	✓	✓	✓	..
194. Rentenbach Eng. Co., Knoxville, Tenn.	40.3	0	✓	..	✓	✓	✓	..
195. Burns & Roe, Inc., Orgdell, N. J.	40.2	4.0	✓	✓	✓	✓	✓	✓
196. American Bridge Div., U. S. Steel, Pittsburgh	40.0*	n.r.	..	..	✓	✓	✓	..
197. Commonwealth Electric Co., Lincoln, Neb.	39.8	0	✓	..	✓	✓	✓	..
198. Hood Corp., Whittier, Calif.	39.7	0	✓	..	✓	✓	✓	..
199. The Hawaii Corp., Honolulu, Hawaii	39.6	0	..	..	✓	✓	✓	..
200. Campanella Corp., Warwick, R. I.	39.4	0	✓	..	✓	✓	✓	..
201. Jos. L. Muscarelle, Inc., Maywood, N. J.	39.1	0	..	..	✓	✓	✓	..
202. R. R. Dawson Bridge Co., Bloomfield, Ky.	39.0	0	..	..	✓	✓	✓	..

Figures include prime construction contracts, shares of joint ventures and subcontracts. Parent company's total includes subsidiaries. Design-construct contracts included at erected value of plant including heavy installed equipment. U.S. n.r. not reported. j. Includes S & S Const. Co. k. Includes Brennan Const. Co. l. Includes Hospital Bldg. & Equipment Co., Inc.

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# ENR

400 continued

	1971 contracts in \$ millions			Construction specialty				
	Total	Foreign	Heavy	High-way	Gen'l build-ings	Mfg., process plants	Do design	D. Ct.
203. Terminal Const. Corp., Wood-Ridge, N. J.	38.4	0	✓	✓	✓	✓	✓	✓
204. The John W. Cowper Co., Inc., Buffalo, N. Y.	38.3	0	✓	✓	✓	✓	✓	✓
205. Martin K. Eby Const. Co., Inc., Wichita, Kan.	38.2	0	✓	✓	✓	✓	✓	✓
206. Allen & O'Hara, Inc., Memphis, Tenn.	38.0	0	✓	✓	✓	✓	✓	✓
207. Bristol Steel & Iron Co., Richmond, Va.	38.0	0	✓	✓	✓	✓	✓	✓
208. Pepper Const. Co., Chicago, Ill.	38.0	0	✓	✓	✓	✓	✓	✓
209. Green Const. Co., Des Moines, Iowa	37.8	0	✓	✓	✓	✓	✓	✓
210. Greenfield Const. Co., Livonia, Mich.	37.6	0	✓	✓	✓	✓	✓	✓
211. The Law Co., Wichita, Kan.	37.4	0	✓	✓	✓	✓	✓	✓
212. M. A. Lombard & Sons Co., Chicago, Ill.	37.4	0	✓	✓	✓	✓	✓	✓
213. Oberer Enterprises, Dayton, Ohio	37.4	0	✓	✓	✓	✓	✓	✓
214. R. S. Noonan, Inc., York, Pa.	37.3	0	✓	✓	✓	✓	✓	✓
215. Linbeck Const. Corp., Houston, Tex.	37.2	0	✓	✓	✓	✓	✓	✓
216. Franchi Const. Co., Inc., Newton, Mass.	37.0	0	✓	✓	✓	✓	✓	✓
217. Arcole Midwest Corp., Evanston, Ill.	36.8	0	✓	✓	✓	✓	✓	✓
218. Blitman Const. Corp., New York, N. Y. (m)	36.8	0	✓	✓	✓	✓	✓	✓
219. L & D Building Co., Latrobe, Pa.	36.6	0	✓	✓	✓	✓	✓	✓
220. Shepherd Const. Co., Inc., Atlanta, Ga.	36.3	0	✓	✓	✓	✓	✓	✓
221. Granger Contg. Co., Inc., Worcester, Mass.	36.1	0	✓	✓	✓	✓	✓	✓
222. Houston Contg. Co., Houston, Tex.	36.0	7.9	✓	✓	✓	✓	✓	✓
223. M. H. Golden Const. Co., San Diego, Calif.	36.0	0	✓	✓	✓	✓	✓	✓
224. William Passalacqua Builders, Inc., Cleveland	35.9	0	✓	✓	✓	✓	✓	✓
225. Union Boiler Co., Inc., Nitro, W. Va.	35.9	0	✓	✓	✓	✓	✓	✓
226. McCrory-Sumwalt Const. Co., Columbia, S. C.	35.7	0	✓	✓	✓	✓	✓	✓
227. Lueder Const. Co., Omaha, Neb.	35.7	0	✓	✓	✓	✓	✓	✓
228. John McShain, Inc., Philadelphia, Pa.	35.5	0	✓	✓	✓	✓	✓	✓
229. Greer Bros. & Young, Inc., London, Ky.	35.5	0	✓	✓	✓	✓	✓	✓
230. J. L. Williams & Co., Inc., Chicago, Ill.	35.3	0	✓	✓	✓	✓	✓	✓
231. Satterfield Const. Co., Inc., Greenwood, S. C.	35.0	0	✓	✓	✓	✓	✓	✓
232. Charles Pankow, Inc., Altadena, Calif.	34.9	0	✓	✓	✓	✓	✓	✓
233. Atlas Const. Co., Inc., Ruston, La. (n)	34.8	0	✓	✓	✓	✓	✓	✓
234. Highland Const. Co., Southfield, Mich.	34.7	0	✓	✓	✓	✓	✓	✓
235. Houdaille-Duval-Wright Co., Jacksonville, Fla.	34.5	0	✓	✓	✓	✓	✓	✓
236. Wm. J. Moran Co., Alhambra, Calif.	34.4	0	✓	✓	✓	✓	✓	✓
237. Murray Walter, Inc., Binghamton, N. Y.	34.3	0	✓	✓	✓	✓	✓	✓
238. James D. Morrissey, Inc., Philadelphia, Pa.	34.0	0	✓	✓	✓	✓	✓	✓
239. Basic Const. Co., Newport News, Va.	33.9	0	✓	✓	✓	✓	✓	✓
240. Great Lakes Dredge & Dock Co., Chicago, Ill.	33.8	1.7	✓	✓	✓	✓	✓	✓
241. Foster & Creighton Co., Nashville, Tenn.	33.7	0	✓	✓	✓	✓	✓	✓
242. Adolphson & Peterson, Inc., Minneapolis, Minn.	33.5	0	✓	✓	✓	✓	✓	✓
243. Mahony-Troast Const. Co., Clifton, N. J.	33.5	0	✓	✓	✓	✓	✓	✓
244. Wilmore, Inc., Rochester, N. Y.	33.3	0	✓	✓	✓	✓	✓	✓
245. Brunzell Const. Co. of Nevada, Reno, Nev.	33.0	0	✓	✓	✓	✓	✓	✓
246. Olson Const. Co., Lincoln, Neb.	33.0	0	✓	✓	✓	✓	✓	✓
247. R. B. Potashnick, Cape Girardeau, Mo.	32.9	11.2	✓	✓	✓	✓	✓	✓
248. Daniel O'Connell's Sons, Inc., Holyoke, Mass.	32.6	0	✓	✓	✓	✓	✓	✓
249. W. F. Holt & Sons, Inc., Brentwood, Tenn.	32.6	0	✓	✓	✓	✓	✓	✓
250. W. J. Megin, Inc., Naugatuck, Conn.	32.5	0	✓	✓	✓	✓	✓	✓
251. Dimeo Const. Co., Providence, R. I.	32.4	0	✓	✓	✓	✓	✓	✓
252. Rock Road Const. Co., Chicago, Ill.	32.4	0	✓	✓	✓	✓	✓	✓
253. Power Const. Co., Oak Park, Ill.	32.4	0	✓	✓	✓	✓	✓	✓
254. E. W. Howell Co., Babylon, N. Y.	32.3	0	✓	✓	✓	✓	✓	✓
255. The Carlson Corp., Cochrane, Mass.	32.3	0	✓	✓	✓	✓	✓	✓
256. Bates & Rogers Const. Corp., Chicago, Ill.	32.2	0	✓	✓	✓	✓	✓	✓
257. Louisiana Paving Co., Inc., Ruston, La. (n)	32.2	0	✓	✓	✓	✓	✓	✓
258. Jacobs Engineering Co., Pasadena, Calif.	32.2	0	✓	✓	✓	✓	✓	✓
259. Denton Const. Co., Grosse Pointe Woods, Mich.	32.2	0	✓	✓	✓	✓	✓	✓
260. E. E. Black, Ltd., Honolulu, Hawaii	32.2	15.2	✓	✓	✓	✓	✓	✓
261. D. Fortunato, Inc., Floral Park, N. Y.	32.1	0	✓	✓	✓	✓	✓	✓
262. Joe M. Rodgers & Assoc., Inc., Nashville, Tenn.	32.0	0	✓	✓	✓	✓	✓	✓
263. Baugh Const. Co., Seattle, Wash.	31.8	0	✓	✓	✓	✓	✓	✓
264. George Tripp & Marona Const. Co., Colmar, Pa.	31.6	0	✓	✓	✓	✓	✓	✓
265. Continental-Heller Corp., Sacramento, Calif.	31.6	0	✓	✓	✓	✓	✓	✓
266. Cives Corp., North Syracuse, N. Y.	31.5	0	✓	✓	✓	✓	✓	✓
267. Edward M. Crough, Inc., Bethesda, Md.	31.0	0	✓	✓	✓	✓	✓	✓
268. Guy H. James Const. Co., Oklahoma City, Okla.	30.7	0	✓	✓	✓	✓	✓	✓
269. Goodrich Building Corp., New York, N. Y.	30.6	0	✓	✓	✓	✓	✓	✓
270. Vecellio & Grogan, Inc., Beckley, W. Va.	30.5	0	✓	✓	✓	✓	✓	✓
271. Six Industries, Inc., Springfield, Ohio	30.4	0	✓	✓	✓	✓	✓	✓
272. Day & Zimmermann, Inc., Philadelphia, Pa.	30.4	0	✓	✓	✓	✓	✓	✓
273. Gibbons & Reed Co., Salt Lake City, Utah	30.4	0	✓	✓	✓	✓	✓	✓
274. Ames-Ennis, Inc., Baltimore, Md.	30.3	0	✓	✓	✓	✓	✓	✓
275. Robert G. Fisher Co., Inc., Fresno, Calif.	30.3	0	✓	✓	✓	✓	✓	✓
276. George W. Kane, Inc., Durham, N. C.	30.3	0	✓	✓	✓	✓	✓	✓
277. Holder Const. Co., Atlanta, Ga.	30.2	0	✓	✓	✓	✓	✓	✓
278. Knutson Const. Co., Minneapolis, Minn.	30.1	0	✓	✓	✓	✓	✓	✓

Figures include prime construction contracts, shares of joint ventures and subcontracts. Parent co. at erected value of plant included heavy installed equipment. \* ENR-reported. Excludes joint ventures, subcontracts, projects outside U.S. n.r. not reported. m. Includes Blitman & Tischler, Taylor, Woodrow, Blitman n. Formerly included with T.L. James & Co., Inc.





	1971 contracts in \$ millions		Heavy	High-way	Construction specialty			
	Total	Foreign			Gen'l build-ings	Mfg., process plants	Do design	Do CM
353. Brown & Matthews, Inc., Union, N. J.	24.5	0	..	..	✓	✓	✓	..
354. Thomas J. Dillon, Akron, Ohio	24.4	0	..	..	✓	✓	✓	..
355. John H. Sellen Const. Co., Seattle, Wash.	24.3	0	..	..	✓	✓	✓	..
356. Geupel DeMars, Inc., Indianapolis, Ind.	24.2	0	..	..	✓	✓	✓	..
357. Eichleay Corp., Pittsburgh, Pa.	24.0	1.6	..	..	✓	✓	✓	..
358. Johnson Bros., Inc., Litchfield, Minn.	24.0	0	✓	✓	✓	✓	✓	..
359. Wm. C. Ehret, Inc., Trenton, N. J.	24.0	0	..	..	✓	✓	✓	..
360. George Hunt, Inc., Clearwater, Fla.	24.0	0	✓	✓	✓	✓	✓	..
361. J. D. Posillico, Inc., Farmingdale, N. Y.	24.0	0	✓	✓	✓	✓	✓	..
362. Pizzagalli Const. Co., South Burlington, Vt.	23.7	2.3	..	..	✓	✓	✓	..
363. Mardian Const. Co., Phoenix, Ariz.	23.6	0	..	..	✓	✓	✓	..
364. Suburban Excavators, Inc., Wakefield, Mass.	23.4	0	✓	✓	✓	✓	✓	..
365. Latex Const. Co., Atlanta, Ga.	23.3	0	✓	✓	✓	✓	✓	..
366. Miner Dederick Const. Co., Inc., Houston, Tex.	23.2	0	..	✓	✓	✓	✓	..
367. Davison Const. Co., Inc., Manchester, N. H.	23.2	0	..	✓	✓	✓	✓	..
368. Northgate Const. Co., Inc., Waltham, Mass.	23.2*	n.r.	..	..	✓	✓	✓	..
369. Tutor-Meyers, North Hollywood, Calif.	23.0	0	✓	✓	✓	✓	✓	..
370. Nat Harrison Assoc., Inc., Miami, Fla.	23.0	2.0	✓	✓	✓	✓	✓	..
371. Arthur A. Kober Co., Bala-Cynwyd, Pa.	23.0	0	..	✓	✓	✓	✓	..
372. Psaty & Fuhrman, Inc., New York, N. Y.	23.0	0	..	✓	✓	✓	✓	..
373. Avella Const. Co., Endicott, N. Y.	23.0	0	..	✓	✓	✓	✓	..
374. Northwest Const. Co., Seattle, Wash.	22.9	0	..	✓	✓	✓	✓	..
375. R. M. Shoemaker Co., Philadelphia, Pa.	22.8	0	..	✓	✓	✓	✓	..
376. Oman Const. Co., Inc., Nashville, Tenn.	22.7	0	✓	✓	✓	✓	✓	..
377. Montgomery Ross Fisher, Inc., Los Angeles, Calif.	22.5	0	..	✓	✓	✓	✓	..
378. Power Systems, Inc., Chicago, Ill.	22.5	0	✓	✓	✓	✓	✓	..
379. C. W. Matthews Contg. Co., Inc., Marietta, Ga.	22.5	0*	✓	✓	✓	✓	✓	..
380. Barnes Const. Co., Inc., Grand Rapids, Mich.	22.3*	n.r.	..	..	✓	✓	✓	..
381. Markward & Karafilis, Inc., Detroit, Mich.	22.2	0	..	✓	✓	✓	✓	..
382. Glen Const. Co., Rockville, Md.	22.2	0	..	✓	✓	✓	✓	..
383. Horvitz Co., Cleveland, Ohio	22.2	0	✓	✓	✓	✓	✓	..
384. Delta Engineering Corp., Houston, Tex.	22.1	6.5	..	✓	✓	✓	✓	..
385. J. A. Tobin Const. Co., Kansas City, Kan.	22.1	0	✓	✓	✓	✓	✓	..
386. Mid Republic Const. Co., Inc., Indianapolis, Ind.	22.1	0	..	✓	✓	✓	✓	..
387. James Julian, Inc., Wilmington, Del.	22.1	0	..	✓	✓	✓	✓	..
388. Harbert Const. Corp., Birmingham, Ala.	22.1	3.8	✓	✓	✓	✓	✓	..
389. Trepte Const. Co., Inc., San Diego, Calif.	22.1	0	..	✓	✓	✓	✓	..
390. McMahan-O'Connor Const. Co., Rochester, Ind.	22.0	0	✓	✓	✓	✓	✓	..
391. First Florida Bldg. Corp. and Shafer & Miller, Miami	22.0	0.2	..	✓	✓	✓	✓	..
392. Excavation Const. Co., Inc., Riverdale, Md.	21.9*	n.r.	✓	✓	✓	✓	✓	..
393. R. W. Wander, Inc., Worthington, Ohio	21.7	0	✓	✓	✓	✓	✓	..
394. Bowerman Bros., Inc., Providence, R. I.	21.6	0	..	✓	✓	✓	✓	..
395. Tecon Corp., Dallas, Tex.	21.6*	n.r.	✓	✓	✓	✓	✓	..
396. Beacon Const. Co., Boston, Mass.	21.5	0	..	✓	✓	✓	✓	..
397. J. F. White Contg. Co., Needham Heights, Mass.	21.3	0	✓	✓	✓	✓	✓	..
398. Southern Road Builders, Augusta, Ga.	21.2	0	..	✓	✓	✓	✓	..
399. Mid State Paving Co., Meridian, Miss.	21.1	0	..	✓	✓	✓	✓	..
400. J. P. Cullen & Son, Janesville, Wis.	21.1*	n.r.	..	..	✓	✓	✓	..

Figures include prime construction contracts, shares of joint ventures and subcontracts. Parent company's total includes subsidiaries. Design-construct contracts included at erected value of plant including heavy installed equipment.\* ENR-reported. Excludes joint ventures, subcontracts, projects outside the U.S. n.r. not reported

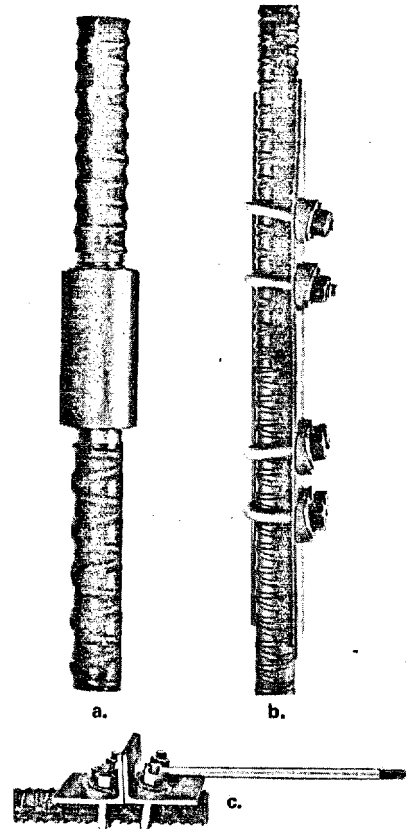
**About the report**

ENGINEERING NEWS-RECORD's ninth annual report on the 400 largest U.S. contractors ranks them according to their 1971 contract awards for work in the U.S. and abroad. In addition to prime contract awards, a company's total includes its share of joint ventures and any subcontracts awarded to it by other prime contractors.

ENR canvassed over 2,800 contractors, asking them to confirm their 1971 U.S. construction contract volume on file with ENR and to report their foreign volume. Nonrespondents (only 18) were ranked by their U.S. prime contract volume on file with ENR.

Types of companies excluded are homebuilders and those acting as their own general contractor, such as developers, investment builders and companies that contract only with a parent or other related (by ownership) company.

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- b. **REBAR BUTT SPLICER** - Is not just for continuation of the rebar but for continuous strength of the bar over the splice. It eliminates overlapping, butt welding or cad welding.
- c. **REBAR TIE SPLICER** - Is an approved method of splicing ties to the rebar as opposed to welding which is often restricted.

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