

# CONSTRUCTION ECONOMICS

ENR's 20-city average cost indexes, wages and material prices. Historical data and details for ENR's 20 cities can be found at [ENR.com/economics](http://ENR.com/economics)

## Construction Cost Index

**+2.0%**  
MAY 2019

ANNUAL INFLATION RATE

1913=100	INDEX VALUE	MONTH	YEAR
CONSTRUCTION COST	11230.01	0.0%	+2.0%
COMMON LABOR	23602.02	0.0%	+1.7%
WAGE \$/HR.	45.33	0.0%	+1.7%

The Construction Cost Index's annual escalation rate fell to 2.0% this month, with the monthly component showing no change.

## Building Cost Index

**+1.9%**  
MAY 2019

ANNUAL INFLATION RATE

1913=100	INDEX VALUE	MONTH	YEAR
BUILDING COST	6111.77	0.0%	+1.9%
SKILLED LABOR	10441.20	0.0%	+1.6%
WAGE \$/HR.	57.76	0.0%	+1.6%

The Building Cost Index's annual escalation rate fell to 1.9%, while the monthly component showed no change.

## Material Cost Index

**+0.4%**  
MAY 2019

MONTHLY INFLATION RATE

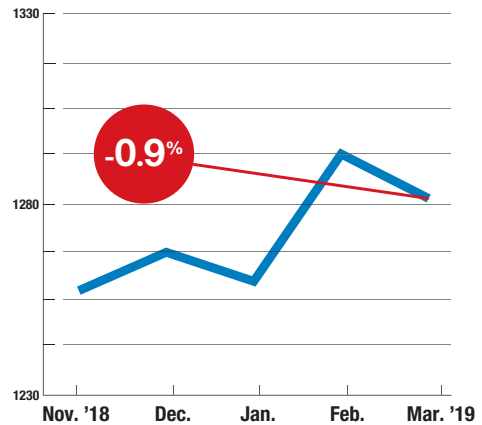
1913=100	INDEX VALUE	MONTH	YEAR
MATERIALS COST	3452.73	+0.4%	+4.5%
CEMENT \$/TON	132.51	+3.7%	+16.1%
STEEL \$/CWT	54.53	+0.8%	+3.0%
LUMBER \$/MBF	598.70	-1.3%	-0.4%

The MCI increased 0.4% this month, while the annual escalation rate is 4.5%.

**The dollar value of total construction put-in-place showed a seasonally adjusted monthly escalation rate of -0.9 in March,** following a rate of 1% in February, according to the U.S. Dept. of Commerce's seasonally adjusted data. On a yearly basis, total construction was 0.8% lower than March 2018. The private sector saw a 8.4% decrease from a year ago, while public work experienced an 8.6% increase. Non-residential construction in both markets experienced decreases compared to this time last year.

## TOTAL CONSTRUCTION

Seasonally adjusted rate in (\$ billions)



PERCENT CHANGE OCT. '18 VS. OCT. '17.

SOURCE: DEPT. OF COMMERCE

**Total Construction** | **277.67** 2019 MAR. | **278.26** 2018 MAR. | **+8.7%** CHG. MONTH | **-0.2** % CHG. YEAR

CONSTRUCTION VALUE YEAR-TO-DATE, \$ BIL.	2019 MAR.	2018 MAR.	% CHG. MONTH	% CHG. YEAR
<b>TOTAL PRIVATE</b>	<b>215.48</b>	<b>221.30</b>	<b>+9.2</b>	<b>-2.6</b>
<b>RESIDENTIAL BUILDINGS</b>	109.09	117.18	+12.9	-6.9
<b>LODGING</b>	7.74	7.11	+7.5	+8.9
<b>OFFICE</b>	15.55	14.45	+4.6	+7.6
<b>COMMERCIAL</b>	18.54	19.78	+3.8	-6.3
<b>HEALTH CARE</b>	7.87	7.79	+3.9	+1.0
<b>EDUCATIONAL</b>	4.64	4.67	+4.2	-0.8
<b>RELIGIOUS</b>	0.68	0.68	+2.7	-1.3
<b>AMUSEMENT AND RECREATION</b>	3.42	3.32	+4.8	+2.9
<b>TRANSPORTATION</b>	3.81	3.38	+10.5	+12.3
<b>COMMUNICATION</b>	5.34	5.94	+10.6	-10.1
<b>POWER</b>	22.67	22.67	+3.2	+2.9
<b>MANUFACTURING</b>	15.80	14.81	+9.1	+6.7
<b>TOTAL PUBLIC</b>	<b>62.18</b>	<b>56.95</b>	<b>+7.3</b>	<b>+9.2</b>
<b>RESIDENTIAL BUILDINGS</b>	1.29	1.44	+4.1	-10.1
<b>OFFICE</b>	2.33	2.04	+8.0	+14.0
<b>COMMERCIAL</b>	1.03	0.76	+2.7	+34.9
<b>HEALTH CARE</b>	2.03	2.15	-0.4	-5.4
<b>EDUCATIONAL</b>	15.88	14.76	+4.0	+7.5
<b>PUBLIC SAFETY</b>	2.13	1.98	+4.2	+7.4
<b>AMUSEMENT AND RECREATION</b>	2.74	2.29	+2.4	+19.3
<b>TRANSPORTATION</b>	7.58	7.26	+7.7	+4.5
<b>POWER</b>	1.31	1.25	-1.8	+5.2
<b>HIGHWAY AND STREET</b>	15.50	13.60	+14.1	+14.0
<b>SEWAGE AND WATER DISPOSAL</b>	5.01	4.62	+10.5	+8.4
<b>WATER SUPPLY</b>	3.10	2.75	+6.1	+12.8
<b>CONSERVATION AND DEVELOPMENT</b>	1.93	1.66	+3.7	+16.1

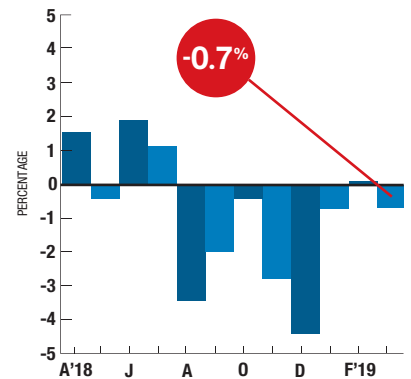
SOURCE: DEPT. OF COMMERCE. NON-SEASONALLY ADJUSTED CONSTRUCTION PUT-IN-PLACE. DETAILS MAY NOT ADD UP TO TOTAL SINCE ALL TYPES OF CONSTRUCTION ARE NOT SHOWN SEPARATELY.

**Plywood prices fell 0.7% in March, following a 0.1% increase in February,** according to the Bureau of Labor Statistics' producer price index. The annual index sits 11.1% lower than it was at this time last year. ENR's 20-city average price for pine 2x4s fell 2.9% in May, while yearly prices are down 6.7%. Prices for the most popular species of 2x4s are down 2.4% from May 2018's level, while monthly prices have increased 1.0%, according to ENR's data. Monthly plywood prices experienced no change, while yearly prices are 5.8% lower than this time last year.

## PRODUCER PRICE INDEX

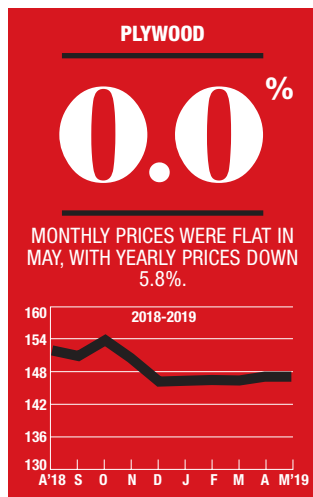
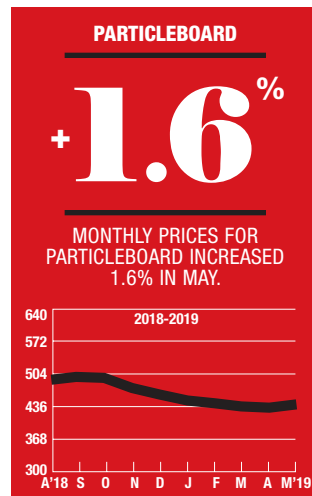
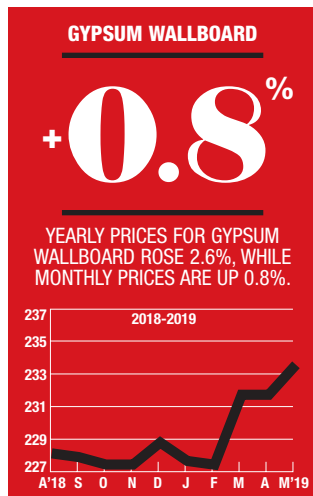
### PLYWOOD

Monthly percentage change



SOURCE: BUREAU OF LABOR STATISTICS

## ENR's Materials Prices For May 2019



## 20-CITY AVERAGE

ITEM	UNIT	\$PRICE	%MONTH	%YEAR
<b>2" X 4" S4S</b>				
Pine	MBF	607.83	-2.9	-6.7
Fir	MBF	555.70	+0.2	-1.4
Common	MBF	570.17	<b>+1.0</b>	-2.4
<b>2" X 6" S4S</b>				
Common	MBF	619.85	-1.3	-6.4
<b>2" X 8" S4S</b>				
Common	MBF	639.44	+0.3	-6.5
<b>2" X 10" S4S</b>				
Common	MBF	687.36	+1.2	-2.9
<b>PLYWOOD</b>				
5/8" Thick	MSF	612.28	<b>0.0</b>	-5.8
<b>PLYFORM</b>				
3/4" Thick	MSF	1038.47	-0.2	+0.4
<b>PARTICLEBOARD: UNDERLAYMENT</b>				
5/8" Thick	MSF	437.15	<b>+1.6</b>	-15.0
<b>GYPSUM BOARD: REGULAR</b>				
1/2"	MSF	282.49	<b>+0.8</b>	+2.6
<b>ROOFING INSULATION</b>				
Unfaced	SF	8.51	+1.2	+3.4
<b>WALL INSULATION</b>				
Unfaced	SF	6.21	+0.8	+2.1

SOURCE: ENR

## BLS PRODUCER PRICE INDEX: MARCH

Gypsum building products manufacturing	JUNE 1981=100	275.10	-1.2	-8.4
Softwood Lumber	1982=100	220.40	+0.6	-13.3
Plywood	1982=100	210.20	-0.7	-11.1

As of April 2019, ENR will be publishing BLS producer price index numbers for lumber products.

SOURCE: BUREAU OF LABOR STATISTICS.

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## Lumber, Plywood, Plyform For May 2019

City prices reflect quotes from single sources and can be volatile. They are not meant to be the prevailing price for a city. Data are a mix of list and transaction prices and may include ENR estimates. Do not compare prices between locations. Use city information to analyze national trends.

ITEM	UNIT	ATLANTA	BALTIMORE	BIRMINGHAM	BOSTON	CHICAGO	CINCINNATI	CLEVELAND	DALLAS	DENVER	DETROIT
<b>2" x 4" S4S</b>											
PINE	MBF	-644.15	+643.17	608.30	+656.72	627.00	-562.21	623.69	635.55	— —	-560.72
FIR	MBF	— —	— —	547.65	— —	570.29	503.59	480.00	— —	567.00	578.54
COMMON	MBF	-600.48	510.32	569.00	+607.61	587.42	532.57	-559.10	583.16	+575.53	+530.96
<b>2" x 6" S4S</b>											
COMMON	MBF	611.70	632.13	583.73	633.00	593.95	-660.00	553.11	+609.95	605.26	-663.75
<b>2" x 8" S4S</b>											
COMMON	MBF	643.65	-622.50	618.96	655.00	634.00	-518.38	+628.23	+642.30	665.48	682.61
<b>2" x 10" S4S</b>											
COMMON	MBF	680.82	770.91	662.58	705.00	677.39	711.67	+625.75	-684.27	700.09	718.79
<b>PLYWOOD</b>											
5/8" THICK	MSF	653.00	689.68	+617.00	619.84	648.40	574.06	-536.25	619.63	632.22	+577.18
<b>PLYFORM</b>											
3/4" THICK	MSF	1057.00	1140.67	+1043.65	1060.09	1111.86	1095.45	1206.25	1049.27	1065.45	1118.00
<b>PARTICLEBOARD: UNDERLAYMENT</b>											
5/8" THICK	MSF	436.00	+524.06	384.77	488.20	-463.08	-330.00	-334.37	450.50	471.36	-383.43
<b>GYPSON BOARD: REGULAR</b>											
1/2"	MSF	283.00	277.08	271.92	304.78	-275.30	234.06	283.43	280.00	298.65	280.93
<b>ROOFING INSULATION</b>											
UNFACED	SF	8.00	9.99	6.92	+8.09	+7.94	9.82	9.78	8.09	7.40	9.77
<b>WALL INSULATION</b>											
UNFACED	SF	6.02	4.97	5.75	6.44	+6.20	4.92	6.90	6.12	-6.25	7.16
ITEM	UNIT	KANSAS CITY	LOS ANGELES	MINNEAPOLIS	NEW ORLEANS	NEW YORK	PHILADELPHIA	PITTSBURGH	ST. LOUIS	SAN FRANCISCO	SEATTLE
<b>2" x 4" S4S</b>											
PINE	MBF	502.24	563.00	-544.23	573.79	— —	— —	-634.19	613.20	+720.00	634.36
FIR	MBF	600.37	565.00	490.00	— —	+564.78	579.05	450.00	641.25	578.00	589.71
COMMON	MBF	-504.69	572.36	-442.78	554.15	+587.12	595.78	-563.11	-506.57	+803.03	610.45
<b>2" x 6" S4S</b>											
COMMON	MBF	-518.14	+630.00	-646.25	563.30	625.94	+625.59	676.00	-685.40	565.28	632.16
<b>2" x 8" S4S</b>											
COMMON	MBF	699.01	+653.75	+664.37	603.54	657.81	+673.00	+682.50	-480.92	618.15	665.78
<b>2" x 10" S4S</b>											
COMMON	MBF	745.68	689.00	+698.50	645.88	690.20	+712.36	+731.91	493.05	687.82	692.33
<b>PLYWOOD</b>											
5/8" THICK	MSF	-508.12	+657.00	589.68	-636.60	628.90	638.12	-609.38	+580.31	608.00	617.76
<b>PLYFORM</b>											
3/4" THICK	MSF	987.00	-1023.44	679.50	+1046.97	1041.53	1055.51	1221.00	691.22	1015.00	1049.31
<b>PARTICLEBOARD: UNDERLAYMENT</b>											
5/8" THICK	MSF	385.93	463.62	-358.43	445.90	466.98	472.93	+405.31	364.37	+680.00	+442.00
<b>GYPSON BOARD: REGULAR</b>											
1/2"	MSF	262.81	302.89	277.83	276.65	278.79	271.75	283.43	252.50	+334.06	+285.00
<b>ROOFING INSULATION</b>											
UNFACED	SF	10.04	+8.96	6.00	6.87	7.57	+7.74	9.90	10.04	7.17	7.18
<b>WALL INSULATION</b>											
UNFACED	SF	5.62	+7.16	5.88	6.06	6.18	+6.36	7.08	7.02	6.42	6.36

+ OR - DENOTES PRICE HAS RISEN OR FALLEN SINCE PREVIOUS REPORT. LUMBER PRICES CONTAIN A MIX OF SPRUCE, PINE, FIR (SPF). COMMON LUMBER PRICES ARE THOSE QUOTED FOR THE MOST POPULAR SPECIES IN THE AREA. QUOTES ARE GENERALLY DELIVERED PRICES. SOME PRICES MAY INCLUDE TAXES OR DISCOUNTS. PRODUCT SPECIFICATION MAY VARY, DEPENDING ON WHAT IS MOST COMMONLY USED OR MOST ACCESSIBLE IN A CITY. QUANTITIES ARE GENERALLY TRUCKLOADS.