## BUILDING ACTIVITY

## BUILDING WORK DONE

## Value of work done

Total building
Volume terms


Value of work done


Mar Mar Mar Mar Mar
19911993199519971999

## MARCH QTR KEY FIGURES

| TREND ESTIMATES(a) | Mar qtr 99 \$m | Dec qtr 98 to <br> Mar qtr 99 <br> \% change | Mar qtr 98 to <br> Mar qtr 99 <br> \% change |
| :---: | :---: | :---: | :---: |
| Value of work done | 8208.5 | 0.3 | 2.8 |
| Total residential building | 4863.8 | -0.4 | 2.3 |
| Non-residential building | 3341.7 | 1.2 | 3.5 |
|  | Mar qtr 99 | Dec qtr 98 to <br> Mar qtr 99 | Mar qtr 98 to Mar qtr 99 |
| SEASONALLY ADJUSTED(a) | \$m | \% change | \% change |
| Value of work done | 8155.2 | -1.5 | 0.9 |
| Total residential building | 4888.0 | 0.9 | 2.4 |
| Non-residential building | 3278.1 | -4.0 | -1.1 |

(a) Chain volume measures, reference year 1996-97.

## MARCH QTR KEY POINTS

## VALUE OF WORK DONE, VOLUME TERMS

## trend estimates

- Following a period of strong growth since the September quarter 1996, the trend estimate of building work done has slowed over the last three quarters.
- Total residential building has remained flat for the last three quarters. The March quarter figure was down by $0.4 \%$ but was still $2.3 \%$ above the figure of a year ago.
- Non-residential building rose by $1.2 \%$ in the quarter, and was $3.5 \%$ above the level of a year ago.


## SEASONALLY ADJUSTED ESTIMATES

- The total value of building work done during the March quarter fell by $1.5 \%$ to $\$ 8,155.2 \mathrm{~m}$, following a rise of $2.6 \%$ in the December quarter 1998.
- Total residential building rose by $0.9 \%$ to $\$ 4,888.0 \mathrm{~m}$, following a $1.0 \%$ decline in the previous quarter.
- Non residential building fell by $4.0 \%$ to $\$ 3,278.1 \mathrm{~m}$, following a rise of $6.9 \%$ in the previous quarter.
- For further information about these and related statistics, contact Roger Mableson on Adelaide 088237 7494, or any ABS office shown on the back cover of this publication.


## NOTES

FORTHCOMING ISSUES

ABOUT THIS ISSUE

CHANGES IN THIS ISSUE

SAMPLING ERRORS

RELATIVE STANDARD ERRORS

ISSUE (Quarter)
June 1999
September 1999

## RELEASE DATE

26 August 1999
25 November 1999

This publication provides an early indication of trends in building activity. The data are estimates based on a response rate of approximately $85 \%$ of the value of building work done during the quarter. More comprehensive and updated results for the December 1998 and March 1999 quarters will be released in Building Activity Australia (Cat. no. 8752.0) on 20 July 1999.

Additional series providing data on private sector building activity (new and total residential, non-residential, total building) have been included in this issue. Data on new houses is not now separately identified.

The estimates in this publication are based on a sample survey of private sector house building activity (including alterations and additions to private sector houses), and a complete enumeration of other building activity. Because data are not collected for all private sector house building jobs, the published estimates are subject to sampling variability. Relative standard errors give a measure of this variability and therefore indicate the degree of confidence that can be attached to the data.

Relative standard errors for the value of work done in the March quarter 1999 for residential building (new and total private, total) and total building (private and total) are given below. There is $67 \%$ confidence that the actual value would be within one standard error of the sample estimate, and 95\% confidence that it lies within two standard errors.
$\qquad$

| New private residential building | 1.2 |
| :--- | ---: |
| Total private residential building | 1.1 |
| Total residential building | 1.1 |
| Private non-residential building | $\ldots$ |
| Total non-residential building | $\ldots$ |
| Private total building | 0.8 |
| Total building | $\mathbf{0 . 7}$ |

W. McLennan

Australian Statistician

## BUILDING WORK DONE: Chain volume measures(a)

## TREND PERCENTAGE CHANGE

TOTAL BUILDING

## TOTAL RESIDENTIAL BUILDING

After a period of growth to the June 1998 quarter, the trend has been flat for the last three quarters.


NON-RESIDENTIAL BUILDING
The trend has been showing small positive changes for the last six quarters.

(a) Reference year 1996-97.

| Period | New private sector | Total private sector | Total | Private sector | Total | Private sector | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ORIGINAL (\$m) |  |  |  |  |  |  |  |
| 1995-96 | 12627.0 | 15137.4 | 15744.7 | 8382.6 | 11486.2 | 23525.8 | 27237.4 |
| 1996-97 | 12574.0 | 15076.9 | 15619.3 | 9413.3 | 12754.9 | 24490.2 | 28374.2 |
| 1997-98 | 15141.9 | 18047.3 | 18508.7 | 9364.5 | 12849.5 | 27411.8 | 31358.2 |
| 1997 |  |  |  |  |  |  |  |
| December | 3858.2 | 4666.2 | 4779.9 | 2454.5 | 3348.7 | 7120.8 | 8128.6 |
| 1998 |  |  |  |  |  |  |  |
| March | 3626.9 | 4299.9 | 4395.5 | 2176.0 | 2984.3 | 6475.6 | 7379.9 |
| June | 4041.2 | 4793.5 | 4928.4 | 2287.3 | 3215.1 | 7080.3 | 8143.6 |
| September | 4066.7 | 4843.4 | 5003.4 | 2556.2 | 3334.9 | 7401.4 | 8337.9 |
| December | 4162.6 | 4984.4 | 5134.3 | 2700.6 | 3610.2 | 7686.8 | 8744.1 |
| 1999 |  |  |  |  |  |  |  |
| March | 3641.2 | 4322.6 | 4500.5 | 2129.0 | 2962.9 | 6453.2 | 7463.0 |
| SEASONALLY ADJUSTED (\$m) |  |  |  |  |  |  |  |
| 1997 |  |  |  |  |  |  |  |
| December | 3709.5 | 4426.8 | 4507.1 | 2300.7 | 3169.4 | 6726.8 | 7689.5 |
| 1998 |  |  |  |  |  |  |  |
| March | 3894.1 | 4650.6 | 4774.7 | 2430.8 | 3313.6 | 7080.9 | 8081.1 |
| June | 4045.7 | 4788.5 | 4924.3 | 2326.0 | 3193.1 | 7101.2 | 8124.6 |
| September | 3965.4 | 4729.6 | 4896.1 | 2401.9 | 3194.6 | 7147.7 | 8073.5 |
| December | 3989.2 | 4733.0 | 4846.0 | 2527.1 | 3413.6 | 7262.6 | 8280.8 |
| 1999 |  |  |  |  |  |  |  |
| March | 3906.0 | 4673.6 | 4888.0 | 2369.0 | 3278.1 | 7050.4 | 8155.2 |
| TREND ESTIMATES (\$m) |  |  |  |  |  |  |  |
| 1997 ( |  |  |  |  |  |  |  |
| December | 3709.7 | 4431.3 | 4534.5 | 2327.5 | 3188.2 | 6748.0 | 7724.4 |
| 1998 |  |  |  |  |  |  |  |
| March | 3893.1 | 4636.9 | 4753.4 | 2358.9 | 3229.7 | 6993.7 | 7982.5 |
| June | 3995.2 | 4748.6 | 4881.6 | 2388.0 | 3236.6 | 7134.5 | 8117.5 |
| September | 3999.2 | 4753.1 | 4898.0 | 2418.6 | 3263.3 | 7175.3 | 8161.2 |
| December | 3966.9 | 4722.7 | 4881.0 | 2437.3 | 3301.6 | 7167.2 | 8183.9 |
| 1999 |  |  |  |  |  |  |  |
| March | 3920.4 | 4682.0 | 4863.8 | 2446.4 | 3341.7 | 7139.6 | 8208.5 |

NON-RESIDENTIAL
BUILDING. $\qquad$ TOTAL BUILDING.....

| Period | New private sector | Total private sector | Total | Private sector | Total | Private sector | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ORIGINAL (\% change from preceding period) |  |  |  |  |  |  |  |
| 1995-96 | -19.8 | -17.7 | -17.2 | 18.9 | 13.2 | -7.7 | -6.7 |
| 1996-97 | -0.4 | -0.4 | -0.8 | 12.3 | 11.0 | 4.1 | 4.2 |
| 1997-98 | 20.4 | 19.7 | 18.5 | -0.5 | 0.7 | 11.9 | 10.5 |
| 1997 |  |  |  |  |  |  |  |
| December | 6.7 | 8.8 | 8.5 | 0.3 | 1.4 | 5.7 | 5.5 |
| 1998 |  |  |  |  |  |  |  |
| March | -6.0 | -7.9 | -8.0 | -11.3 | -10.9 | -9.1 | -9.2 |
| June | 11.4 | 11.5 | 12.1 | 5.1 | 7.7 | 9.3 | 10.3 |
| September | 0.6 | 1.0 | 1.5 | 11.8 | 3.7 | 4.5 | 2.4 |
| December | 2.4 | 2.9 | 2.6 | 5.6 | 8.3 | 3.9 | 4.9 |
| 1999 |  |  |  |  |  |  |  |
| March | -12.5 | -13.3 | -12.3 | -21.2 | -17.9 | -16.0 | -14.7 |
| SEASONALLY ADJUSTED (\% change from preceding quarter) |  |  |  |  |  |  |  |
| 1997 |  |  |  |  |  |  |  |
| December | 6.2 | 5.9 | 4.8 | -0.3 | -0.1 | 3.4 | 3.0 |
| 1998 |  |  |  |  |  |  |  |
| March | 5.0 | 5.1 | 5.9 | 5.7 | 4.5 | 5.3 | 5.1 |
| June | 3.9 | 3.0 | 3.1 | -4.3 | -3.6 | 0.3 | 0.5 |
| September | -2.0 | -1.2 | -0.6 | 3.3 | - | 0.7 | -0.6 |
| December | 0.6 | 0.1 | -1.0 | 5.2 | 6.9 | 1.6 | 2.6 |
| 1999 |  |  |  |  |  |  |  |
| March | -2.1 | -1.3 | 0.9 | -6.3 | -4.0 | -2.9 | -1.5 |


|  | TREND ESTIMATES (\% change from preceding quarter) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1997 |  |  |  |  |  |  |  |
| December | 5.7 | 5.6 | 5.1 | 1.6 | 0.7 | 3.7 | 3.3 |
| 1998 |  |  |  |  |  |  |  |
| March | 4.9 | 4.6 | 4.8 | 1.3 | 1.3 | 3.6 | 3.3 |
| June | 2.6 | 2.4 | 2.7 | 1.2 | 0.2 | 2.0 | 1.7 |
| September | 0.1 | 0.1 | 0.3 | 1.3 | 0.8 | 0.6 | 0.5 |
| December | -0.8 | -0.6 | -0.3 | 0.8 | 1.2 | -0.1 | 0.3 |
| 1999 |  |  |  |  |  |  |  |
| March | -1.2 | -0.9 | -0.4 | 0.4 | 1.2 | -0.4 | 0.3 |

NON-RESIDENTIAL
BUILDING.............. TOTAL BUILDING.

|  | New | Total |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | private | private |  | Private | Private |  |
| sector | sector | Total | sector | Total | sector | Total |


| ORIGINAL (\$m) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1995-96 | 12569.8 | 15074.5 | 15677.0 | 8274.6 | 11339.4 | 23349.1 | 27016.4 |
| 1996-97 | 12574.0 | 15076.9 | 15619.3 | 9413.3 | 12754.9 | 24490.2 | 28374.2 |
| 1997-98 | 15343.4 | 18268.5 | 18738.9 | 9721.6 | 13328.7 | 27990.1 | 32067.6 |
| 1997 |  |  |  |  |  |  |  |
| December | 3898.7 | 4711.5 | 4827.1 | 2538.6 | 3461.8 | 7250.0 | 8288.9 |
| 1998 |  |  |  |  |  |  |  |
| March | 3685.0 | 4364.4 | 4462.2 | 2271.3 | 3112.7 | 6635.7 | 7574.9 |
| June | 4127.9 | 4888.2 | 5027.0 | 2411.6 | 3380.8 | 7299.8 | 8407.8 |
| September | 4181.5 | 4969.9 | 5135.7 | 2718.4 | 3541.6 | 7688.3 | 8677.3 |
| December | 4306.7 | 5144.1 | 5298.7 | 2900.0 | 3868.5 | 8044.1 | 9167.2 |
| 1999 |  |  |  |  |  |  |  |
| March | 3795.9 | 4495.3 | 4685.1 | 2309.1 | 3209.0 | 6804.4 | 7894.1 |


| SEASONALLY ADJUSTED (\$m) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1997 |  |  |  |  |  |  |  |
| December | 3748.7 | 4474.4 | 4591.2 | 2384.2 | 3281.7 | 6858.9 | 7855.4 |
| 1998 |  |  |  |  |  |  |  |
| March | 3954.6 | 4725.4 | 4832.3 | 2540.7 | 3459.7 | 7265.3 | 8315.5 |
| June | 4129.1 | 4888.1 | 5017.7 | 2454.9 | 3360.2 | 7330.0 | 8397.5 |
| September | 4084.2 | 4856.3 | 5018.7 | 2565.2 | 3404.2 | 7437.5 | 8403.0 |
| December | 4134.3 | 4887.8 | 5043.2 | 2725.2 | 3670.4 | 7613.2 | 8692.3 |
| 1999 |  |  |  |  |  |  |  |
| March | 4078.8 | 4863.4 | 5067.1 | 2580.3 | 3562.5 | 7446.8 | 8659.2 |


| ESTIMATES (\$m) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1997 |  |  |  |  |  |  |  |
| December | 3747.1 | 4477.6 | 4588.8 | 2410.0 | 3298.8 | 6877.1 | 7885.4 |
| 1998 |  |  |  |  |  |  |  |
| March | 3953.3 | 4710.4 | 4825.9 | 2466.3 | 3371.8 | 7175.1 | 8206.2 |
| June | 4081.9 | 4848.4 | 4978.3 | 2522.1 | 3410.5 | 7368.7 | 8394.9 |
| September | 4115.1 | 4880.4 | 5030.3 | 2581.6 | 3474.3 | 7464.7 | 8499.3 |
| December | 4112.1 | 4879.4 | 5051.0 | 2628.6 | 3551.8 | 7512.8 | 8596.7 |
| 1999 |  |  |  |  |  |  |  |
| March | 4094.0 | 4869.0 | 5062.6 | 2665.0 | 3631.8 | 7539.6 | 8704.5 |

VALUE OF BUILDING WORK DONE: All series, Percentage change

RESIDENTIAL BUILDING. $\qquad$ NON-RESIDENTIAL BUILDING. $\qquad$ TOTAL BUILDING.....

| Period | New private sector | Total private sector | Total | Private sector | Total | Private sector | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ORIGINAL (\% change from preceding period) |  |  |  |  |  |  |  |
| 1995-96 | -18.2 | -16.0 | -15.5 | 22.3 | 16.4 | -5.6 | -4.6 |
| 1996-97 | - | - | -0.4 | 13.8 | 12.5 | 4.9 | 5.0 |
| 1997-98 | 22.0 | 21.2 | 20.0 | 3.3 | 4.5 | 14.3 | 13.0 |
| 1997 |  |  |  |  |  |  |  |
| December | 7.3 | 9.5 | 9.1 | 1.5 | 2.6 | 6.5 | 6.3 |
| 1998 |  |  |  |  |  |  |  |
| March | -5.5 | -7.4 | -7.6 | -10.5 | -10.1 | -8.5 | -8.6 |
| June | 12.0 | 12.0 | 12.7 | 6.2 | 8.6 | 10.0 | 11.0 |
| September | 1.3 | 1.7 | 2.2 | 12.7 | 4.8 | 5.3 | 3.2 |
| December | 3.0 | 3.5 | 3.2 | 6.7 | 9.2 | 4.6 | 5.6 |
| 1999 |  |  |  |  |  |  |  |
| March | -11.9 | -12.6 | -11.6 | -20.4 | -17.0 | -15.4 | -13.9 |


| SEASONALLY ADJUSTED (\% change from preceding quarter) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1997 |  |  |  |  |  |  |  |
| December | 6.8 | 6.5 | 6.4 | 0.8 | 1.0 | 4.2 | 4.0 |
| 1998 |  |  |  |  |  |  |  |
| March | 5.5 | 5.6 | 5.3 | 6.6 | 5.4 | 5.9 | 5.9 |
| June | 4.4 | 3.4 | 3.8 | -3.4 | -2.9 | 0.9 | 1.0 |
| September | -1.1 | -0.7 | - | 4.5 | 1.3 | 1.5 | 0.1 |
| December | 1.2 | 0.6 | 0.5 | 6.2 | 7.8 | 2.4 | 3.4 |
| 1999 |  |  |  |  |  |  |  |
| March | -1.3 | -0.5 | 0.5 | -5.3 | -2.9 | -2.2 | -0.4 |


|  | TREND ESTIMATES (\% change from preceding quarter) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1997 |  |  |  |  |  |  |  |
| December | 6.2 | 6.1 | 5.7 | 2.7 | 1.8 | 4.5 | 4.1 |
| 1998 |  |  |  |  |  |  |  |
| March | 5.5 | 5.2 | 5.2 | 2.3 | 2.2 | 4.3 | 4.1 |
| June | 3.3 | 2.9 | 3.2 | 2.3 | 1.1 | 2.7 | 2.3 |
| September | 0.8 | 0.7 | 1.0 | 2.4 | 1.9 | 1.3 | 1.2 |
| December | -0.1 | - | 0.4 | 1.8 | 2.2 | 0.6 | 1.1 |
| 1999 |  |  |  |  |  |  |  |
| March | -0.4 | -0.2 | 0.2 | 1.4 | 2.3 | 0.4 | 1.3 |

## INTRODUCTION

1 This publication contains preliminary estimates from the quarterly Building Activity Survey of the value of building work done during the quarter. The data contained in this publication are early estimates based on a response rate of approximately $85 \%$ of the value of building work done during the quarter. More comprehensive and updated results for the last two quarters will be available shortly in Building Activity, Australia (Cat. no. 8752.0).
2 The statistics were compiled on the basis of returns collected from builders and other individuals and organisations engaged in building activity. The quarterly survey consists of two components:

- a sample survey of private sector jobs involving new house construction or alterations and additions valued at $\$ 10,000$ or more to houses
- a complete enumeration of jobs involving construction of new residential buildings other than private sector houses, all alterations and additions to residential buildings (other than private sector houses) with an approval value of $\$ 10,000$ or more, and all non-residential building jobs with an approval value of $\$ 50,000$ or more.


## SCOPE AND COVERAGE

3 The statistics relate to building activity which includes construction of new buildings and alterations and additions to existing buildings. Construction activity not defined as building (e.g. construction of roads, bridges, railways, earthworks, etc.) is excluded.

## RELATIONSHIP WITH NATIONAL ACCOUNTS

4 Data on the value of work done on the construction of new residential buildings, alterations and additions to residential buildings, private sector non-residential buildings (from the Building Activity Survey) and the value of engineering construction activity (from Cat. no. 8762.0) are the major source data which are used to compile the national accounts estimates for private gross fixed capital formation on dwellings, and other buildings and structures. However, there are some adjustments to the survey data which are made in the process of compiling these national accounts series. Allowances are made for the value of building activity which is out of scope of the Building Activity Survey and the Engineering Construction Activity Survey. Such activity includes work done on projects which fall below the size cut-offs used for the surveys and also the value of work done which is undertaken without obtaining a building permit, either because such a permit is not required or because the requisite permit is not obtained. The national accounts estimates also make allowances for purchases (less sales) of buildings and other structures from (to) the public sector.

## DEFINITIONS

5 A building is defined as a rigid, fixed and permanent structure which has a roof. Its intended purpose is primarily to house people, plant, machinery, vehicles, goods or livestock. An integral feature of a building's design, to satisfy its intended use, is the provision for regular access by persons.

6 A dwelling unit is defined as a self-contained suite of rooms, including cooking and bathing facilities and intended for long-term residential use. Units (whether self-contained or not) within buildings offering institutional care, such as hospitals, or temporary accommodation such as motels, hostels and holiday apartments, are not defined as dwelling units. The value of units of this type is included in non-residential building.

7 A residential building is defined as a building predominantly consisting of one or more dwelling units. Residential buildings can be either houses or other residential buildings:

- A bouse is defined as a detached building predominantly used for long-term residential purposes and consisting of only one dwelling unit. Thus, detached 'granny flats' and detached dwelling units (such as caretakers' residences) associated with non-residential buildings are defined as houses for the purpose of these statistics.
- An other residential building is defined as a building which is predominantly used for long-term residential purposes and which contains (or has attached to it) more than one dwelling unit (e.g. includes townhouses, duplexes, blocks of flats, apartment buildings, etc.).
8 Total residential building work done is included for the private sector, split between 'new private' and 'total private'. The latter series includes work done on alterations and additions jobs valued at $\$ 10,000$ or more.

9 The value of building work done during the period represents the estimated value of building work actually carried out during the quarter on jobs which have commenced.

## BUILDING CLASSIFICATION

10 Ownership. The ownership of a building is classified as either public sector or private sector, according to the sector of the intended owner of the completed building as evident at the time of approval. Residential buildings being constructed by private sector builders under government housing authority schemes whereby the authority has contracted, or intends to contract, to purchase the buildings on or before completion, are classified as public sector.

11 Seasonally adjusted building statistics are shown in tables $1-4$. In the seasonally adjusted series, account has been taken of normal seasonal factors and the effect of movement in the date of Easter which may, in successive years, affect figures for different quarters. Details regarding the methods used in seasonally adjusting the series are available on request.
12 Since seasonally adjusted statistics reflect both irregular and trend movements, an upward or downward movement in a seasonally adjusted series does not necessarily indicate a change of trend. Particular care should therefore be taken in interpreting individual quarter-to-quarter movements. Each of the component series shown has been seasonally adjusted independently. As a consequence, while the unadjusted components in the original series shown add to the totals, the adjusted components may not add to the adjusted totals.

13 As happens with all seasonally adjusted series, the seasonal factors are reviewed annually to take account of each additional year's data. For the Building Activity Survey, the results of the latest review are shown in the December quarter issue each year.

14 Seasonally adjusted series can be smoothed to reduce the impact of the irregular component in the adjusted series. This smoothed seasonally adjusted series is called a trend estimate.

15 The trend estimates are derived by applying a 7 -term Henderson moving average to the seasonally adjusted series. The 7-term Henderson average (like all Henderson averages) is symmetric but, as the end of a time series is approached, asymmetric forms of the average are applied. Unlike weights of the standard 7-term Henderson moving average, the weights employed here have been tailored to suit the particular characteristics of individual series.

16 While the smoothing technique described in paragraphs 12 and 13 enables trend estimates to be produced for recent quarters, it does result in revisions to the estimates for the most recent three quarters as additional observations become available. There may also be revisions because of changes in the original data and as a result of the re-estimation of the seasonal factors. For further information, see Information Paper: A Guide to Interpreting Time Series Monitoring Trends: an Overview (Cat. no. 1348.0) or contact the Assistant Director, Time Series Analysis on Canberra 0262526345.

## CHAIN VOLUME MEASURES

## ACKNOWLEDGMENT

17 Chain volume estimates of the value of work done are presented in original, seasonally adjusted and trend terms.

18 While current price estimates of value of work done reflect both price and volume changes, chain volume estimates measure changes in value after the direct effects of price changes have been eliminated and therefore only reflect volume changes. The deflators used to revalue the current price estimates in this publication are derived from the same price data underlying the deflators compiled for the dwellings and new other building components of the national accounts aggregate 'Gross fixed capital formation'.
19 The chain volume measures of building work done appearing in this publication are annually reweighted chain Laspeyres indexes referenced to current price values in a chosen reference year (currently 1996-97). The reference year will be updated annually in the June quarter publication. Each year's data in the value of building work done series are based on the prices of the previous year, except for the quarters of the latest incomplete year (i.e. for the 1998-99 financial year) which are based upon the current reference year (i.e. 1996-97). Comparability with previous years is achieved by linking (or chaining) the series together to form a continuous time series. Further information on the nature and concepts of chain volume measures is contained in the ABS Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts (Cat. no. 5248.0).

20 The factors used to seasonally adjust the chain volume series are identical to those used to adjust the corresponding current price series.

21 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the Census and Statistics Act 1905.
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## EXPLANATORY NOTES continued

## UNPUBLISHED DATA

## RELATED PUBLICATIONS

23 Users may also wish to refer to the following publications which are available on request:

Building Activity, Australia: Dwelling Unit Commencements, Preliminary (Cat. no. 8750.0) - issued quarterly
Building Activity, Australia (Cat. no. 8752.0) - issued quarterly
Building Approvals, Australia (Cat. no. 8731.0) — issued monthly
Private Sector Construction Industry, Australia, 1996-97 (Cat. no. 8772.0)
Engineering Construction Activity, Australia (Cat. no. 8762.0) — issued quarterly
House Price Indexes: Eight Capital Cities (Cat. no. 6416.0) - issued quarterly
Housing Finance for Owner Occupation, Australia (Cat. no. 5609.0) issued monthly
Price Index of Materials Used in Building Other Than House Building, Six State Capital Cities (Cat. no. 6407.0) — issued quarterly
Price Index of Materials Used in House Building, Six State Capital Cities (Cat. no. 6408.0) - issued quarterly

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| $\cdots$ | not applicable |
| - | nil or rounded to zero |

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

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