

# **Trips, Slips and Falls Project**

prepared for

# Australian Building Codes Board (ABCB)



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# Study Background, Aims & Method.

The Australian Building Codes Board commissioned **Di Marzio Research** to conduct an independent survey designed to help *"identify the impact of proposed BCA changes to the riser and going dimensions of stairs and the provision of handrails".* 

The survey included stair manufacturers / installers, builders, architects and designers in Sydney, Melbourne, Brisbane and Perth. The key aim was to identify the extent to which current standard practice relating to stairs and handrails is in accord with the proposed changes. If there is high accord then the impact of the proposed changes would be minimal, otherwise there will be cost implications needing to be considered.

There was some urgency for the results of this survey and so we adopted a telephone interview approach using computer aided interviewing (CATI). We have successfully interviewed these types of targets before using this method in prior surveys for ABCB.

We were able to access the ABCB subscriber database (to the BCA) for sampling the builders, architects and designers whilst stair manufacturers / installers were sourced from the Yellow Pages.

A total sample of 200 was considered suitable to address the study aims by providing a reasonable overall fix on the issue and allowing us to contrast the segments. We sought a mix of eligible respondents by segment and city, with some flexibility allowed given the urgency issue, and that was achieved; viz:

Segment	Melbourne	Sydney	Brisbane	Perth	Total
Builders	20	17	13	11	61
Architects	18	10	8	10	46
Designers	16	19	7	-	42
Stair M/I	9	13	17	12	51
Total	63	59	45	33	200

# (Note: M/I = manufactures/installers)

More details on the sample are shown in Table 1 of the detailed findings.

The questionnaire used can be found in the Appendix. It needed to be quite short as we had to approach these busy targets during their working day. This was the case without compromising the survey objectives. We also had a Letter of Authority from ABCB to facilitate our approach and this is also appended.

The survey fieldwork was undertaken by the trained interviewers of MarketMetrics under fully supervised conditions from their Melbourne office over the period of February, 17-19, 2010.

The Detailed Findings are presented in the form of tables in the body of this report that show the results for all questions asked by segment and for the total sample. An Executive Summary with interpretative commentary is contained in the next section with references also provided to the Detailed Findings.

# **Executive Summary.**

# **Residential Stair Risers**

- 86% say they manufacture, install or recommend a "**typical**" dimension here (We defined "typical" as *'a dimension used all or most of the time'*). Segment differences are only minor in this respect.
- Of the 86% adopting a typical dimension, 81% say it is in the 150-180mm range. This translates into 70% of the total sample but some segment variations exist (which are presented in Table 2).
- Of the 14% (not adopting a typical dimension), 63% say their "most common" riser dimension falls into the 150-180mm range. This translates into 9% of the total sample.
- Hence, for 79% of the total sample, their "typical" or "most common" residential stair riser dimension is in the 150-180mm range. We also found that 58% of this group claim to never manufacture, install or recommend residential stair riser dimensions outside the 150-180mm range.

This translates into **45% of the total sample** who **always "use" residential stair risers in the 150-180mm range.** 

Builders are more commonly found in this group whilst stair manufacturer/installers are relatively less prevalent.

• Among those who do not always "use" 150-180mm risers, we have calculated that on average, 29% of their residential risers fall outside the 150-180mm range.

Therefore, it is apparent that for residential stair risers, the use of dimensions outside the 150-180mm range is not so common.

Further on we summarise the key incidence results here diagrammatically.

See also Table 2 in the Detailed Findings.

# **Commercial Stair Risers**

- 82% of those who work on both residential and commercial stairs said they typically adopt the same riser dimensions for both applications.
- Among the rest, the clear majority say their "typical" or "most common" riser dimension falls into the 150-180mm range.
- Taking all those in our sample who work on commercial stairs, we discovered **51% always "using" commercial stair risers in the 150-180mm range**.

Builders are more commonly found in this group whilst the incidence of stair manufacturer/installers is below average (see Table 5 in the detailed findings).

• Among those who do not always "use" 150-180mm risers, on average we have calculated that 33% of their risers fall outside the 150-180mm range.

Therefore, as is the case for residential stair risers, the use of dimensions outside the 150-180mm range for commercial applications is not pronounced.

We summarise the key findings here diagrammatically for both residential and commercial riser applications overleaf:

# CHART A – Summary of Riser Dimensions Favoured



Risers ALWAYS fall into 150-180mm range

# If NOT always within 150-180mm, mean estimated percentage of Risers outside this range



See also Tables 4-5 in the Detailed Findings.

# **Residential Stair Treads or Goings**

- 90% say they manufacture, install or recommend a "typical" dimension here. This ranges from 81% of stair manufacturers/installers to 100% of architects.
- Of the 90% adopting a typical dimension, almost one in four (24%) say it is in the 280-355mm range. The clear majority in each segment answered "below 280mm" here.

As a proportion of the total sample, 21% typically adopt the 280-355mm range.

- Of the 10% (not adopting a typical dimension), 22% say their "most common" tread dimension falls into the 280-355mm range. This translates into 2% of the total.
- Hence, for 23% of the total sample, their "typical" or "most common" residential stair tread dimension is in the 280-355mm range. We also found that 48% of this group claim to never manufacture, install or recommend residential stair tread dimensions below the 280mm range.

This translates into **11% of the total sample** who **always "use" residential stair treads in the 280-355mm range.** Segment differences here are insignificant.

• Among those who do not always "use" 280-355mm treads, on average we have calculated that 63% of their treads fall below the 280mm range.

Clearly we can conclude from the above results, that for residential stair treads, the use of dimensions in the 280-355mm range is very much in the minority across the board, and greatly outweighed by treads below 280mm.

Further on we summarise the key incidence findings diagrammatically

See also Table 3 in the Detailed Findings.

# **Commercial Stair Treads or Goings**

- 74% of those who work on both residential and commercial stairs said they typically adopt the same tread dimensions for both applications.
- Taking all those in our sample who work on commercial stairs, we discovered **17% always "using" commercial stair treads in the 280-355mm range.**
- Among those who do not always "use" 280-355mm treads, on average we have calculated that 53% of their treads fall below the 280mm range.

Below we summarise the key incidence results diagrammatically for both residential and commercial applications:

# CHART B – Summary of Tread Dimensions Favoured



Treads always fall into 280-355mm range

If not always within 280-350mm, mean estimated percentage of treads below this range



See also Table 4 & 6 in the Detailed Findings.

# **Residential Stair Handrails**

• 59% of respondents told us that **ALL** their residential stairs have a handrail along the full length, and on at least one side of the stairway.

On average this applies to 85% of their residential stairs and this proportion hardly differs by segment (based on the survey responses).

• Where such stairs do not have a full length handrail, a slight majority (52%) said it typically extends for half the stairway or even more. 7% said "less than half" and 26% indicated that no handrail would be there, with the rest (15%) were unable to answer this question.

See also Table 7 in the Detailed Findings.

# The Bottom Line.

This survey indicates that for **stair risers**, "use" of the 150-180mm range is very much the norm in both residential and commercial applications.

Conversely for **stair treads/goings**, use of the 280-355mm range is in the minority with treads below 280mm favoured strongly.

In residential properties, the prevailing pattern is for **handrails** to be constructed that extend the full length of the stairway. If not, it is more likely than otherwise, that the handrail extends for at least half of the stairway length.

# The Detailed Findings.

DMR-10021355 ABCB report.doc

# 1. Sample Details.

		Segments				
	Total Sample (200) %	Builders (61) %	Architects (46) %	Designers (42) %	Stair Mfr/Ins (51) %	
Segment*:						
Builders	31	100	-	-	-	
Architects	23	-	100	-	-	
Designers	21	-	-	100	-	
Stair Manufacturers /	26	_	_	_	100	
Installers	20	-	-	-	100	
Work on:						
Residential only	45	<mark>62</mark>	33	43	37	
Commercial only	12	7	17	17	8	
Both	44	31	50	40	55	
Location:						
Melbourne	32	33	39	38	18	
Sydney	30	28	22	45	25	
Brisbane	23	21	17	17	33	
Perth	17	18	22	-	24	
Gender:						
Male	91	98	85	81	94	
Female	9	2	15	19	6	
No of full-time employees:						
1	30	28	26	38	27	
2-3	30	36	24	31	27	
4-5	9	10	7	17	4	
6-10	11	10	20	10	4	
11-20	12	7	17	2	20	
21-50	4	-	-	2	12	
50+	5	8	7	-	4	

Source: Detailed Tabular Results Tables 1, 4, 5, 33, 34

Notes:

- Any **blue** or **green** figures indicate results that are respectively above or below the total 1. sample score to a statistically significant degree at least to the 95% confidence level.
- \* Based on QSC (where respondents classified themselves).
   1% said "don't know" about number of employees.
   Mfr/Ins means manufacturer or installer.

# 2. Residential Stair Risers

- Q.2: In your case, is there a <u>typical</u> dimension for residential stair risers that you make, recommend or install? (by 'typical' we mean a dimension that you use all or most of the time).
- Q.3: (IF "YES") What is the typical dimension for such residential stair risers in <u>millimetres</u> that you would either make, recommend or install? Would it be...(READ OUT)
- Q.4 (IF "NO") What would be the <u>most common</u> dimension for such residential stair risers in <u>millimetres</u> that you would either make, recommend or install? Would it be...(READ OUT)
- Q.5 Do any of your residential stair risers ever fall outside the dimensions of 150 millimetres to 180 millimetres?
- Q.6 (IF "YES") In percentage terms, can you estimate what proportion of your residential stair risers would fall outside the dimensions of 150 millimetres to 180 millimetres in your case? (IF NECESSARY READ OUT).

		Segments			
	Total Sample	Builders	Architects	Designers	Stair Mfr/Ins
	(177) %	(57) %	(38) %	(35) %	(47) %
A 'typical' riser dimension used:					
Yes	86	91	82	83	87
No	13	9	18	14	13
If 'yes', typical riser dimension is?	(153)	(52)	(31)	(29)	(41)
Under 150mm	1	2	-	-	-
150mm – 180mm	81	90	100	76	59
More than 180mm	16	6	-	24	37
Can't say	2	2	-	-	5
If 'no', most common riser dimension is?	(24)	(5)	(7)	(6)	(6)
150mm – 180mm	63	40	86	83	33
More than 180mm	21	40	14	-	33
Can't say	17	20	-	17	33
Stair risers ever fall outside 150-180mm?	(139)	(49)	(37)	(27)	(26)
Yes	40	24	57	37	50
No	58	76	41	59	46
Don't know	2	-	3	4	4
*Summary of dimensions used :	(177)	(57)	(38)	(35)	(47)
Always in range of 150mm-180mm	45	65	39	46	26
Not always in range of 150mm-180mm	53	35	58	51	72
Can't say	2	-	3	3	2
**Estimated % of risers outside 150-180mm:	(94)	(20)	(22)	(18)	(34)
Under 10%	49	70	68	44	26
10-49%	12	-	19	-	24
Over 50%	27	20	5	44	35
Mean Estimated %	29	21	13	40	41
Don't know	12	10	9	11	15

Source: Detailed Tabular Results Tables 6-11

1. Base = those who work on residential buildings only or on both residential and commercial buildings.

2. \* Summary based on assessing responses to prior questions (Q 2-Q5) for total applicable sample.

- 3. \*\* Asked if dimensions are <u>not</u> always in 150-180mm range.
- 4. Any **blue** or **green** figures indicate results respectively above or below total sample score to a statistically significant degree to at least the 95% confidence level.

5. 1% said "don't know" to Q2.

Notes:

# 3. Residential Stair Treads or Goings

- Q.7: Now some questions about the stair treads or goings by which we mean the horizontal length of an individual stair in a <u>residential</u> building. In your case, is there a <u>typical</u> dimension for <u>residential</u> stair treads or goings that you make, recommend or install? (by 'typical' we mean a dimension that you use all or most of the time).
- Q.8: (IF "YES") Excluding tapered treads, what is the typical dimension for such <u>residential</u> stair treads or goings in <u>millimetres</u> that you would either make, recommend or install? Would it be...(READ OUT)
- Q.9 (IF "NO") What would be the <u>most common</u> dimension for such <u>residential</u> stair treads or goings in <u>millimetres</u> that you would either make, recommend or install? Would it be...(READ OUT)
- Q.10 Do any of your *residential* stair treads or goings ever fall *below* 280 millimetres?
- Q.11 (IF "YES") In percentage terms, can you estimate what proportion of your <u>residential</u> stair treads or goings would fall **below** 280 millimetres in your case? (IF NECESSARY READ OUT).

		Segments			
	Total Sample	Buildere	Architacto	Decimero	Stair
	(177)	(57)	(38)	(35)	(47)
	%	%	%	%	%
A 'typical' tread dimension used:					
Yes	90	91	100	89	81
No	8	9	-	11	13
If 'yes', typical tread dimension is	(159)	(52)	(38)	(31)	(38)
Under 280mm	75	67	71	81	87
280mm – 355mm	24	31	29	19	13
Can't say	1	2	-	-	-
If 'no', most common tread dimension is	(18)	(5)	(-)	(4)	(9)
Under 280mm	50	60	-	50	44
280mm – 355mm	22	-	-	50	22
Can't say	28	40	-	-	33
Stair treads ever fall below 280mm?	(42)	(16)	(11)	(8)	(7)
Yes	48	56	64	25	29
No	48	38	36	63	71
Don't know	5	6	-	13	-
Summary of dimensions used *:	(177)	(57)	(38)	(35)	(47)
Always in range of 280mm-355mm	11	11	11	14	11
Not always in range of 280mm-355mm	88	88	89	83	89
Can't say	1	2	-	3	-
Estimated % of treads below 280mm:	(155)	(50)	(34)	(29)	(42)
Under 10%	9	14	12	7	2
10-49%	10	12	18	3	2
Over 50%	74	66	65	86	81
Mean Estimated %	63	57	58	68	72
Don't know	8	8	6	3	14

Source: Detailed Tabular Results Tables 12-17

Notes:

1. Base = those who work on residential buildings only or on both residential and commercial buildings.

2. \* Summary based on assessing responses to prior questions (Q 7-Q10) for total applicable sample.

3. \*\* Asked if dimensions are <u>not</u> always in 280-355mm range.

 Any blue or green figures indicate results respectively above or below total sample score to a statistically significant degree to at least the 95% confidence level.

5. 2% said "don't know" to Q7.

# 4. Do Riser and Tread Dimensions Vary for Residential & Commercial Applications?

Q.12: Are the dimensions of your stair risers and treads in commercial properties, typically the same as the dimensions you use in residential properties, or do those riser and tread dimensions differ between residential and commercial? (IF NECESSARY READ OUT TO CLARIFY).

		Segments			
	Total Sample (87) %	Builders (19) %	Architects (23) %	Designers (17) %	Stair Mfr/Ins (28) %
Risers & treads are typically the same for residential and commercial	71	95	70	53	68
Risers are the same but treads differ	11	5	13	12	14
Treads are the same but risers differ	3	-	9	-	14
Both treads and risers differ between commercial and residential	13	-	9	29	14
Don't know	1	-	-	6	-

Source: Detailed Tabular Results Table 18

Notes:

1. Asked of respondents who work on both residential and commercial buildings.

# 5. Commercial Stair Risers

- Q.13 In your case, is there a <u>typical</u> dimension for <u>commercial</u> stair risers that you make, recommend or install? (by 'typical' we mean a dimension that you use all or most of the time).
- Q.14 (IF "YES") What is the typical dimension for such <u>commercial</u> stair risers in <u>millimetres</u> that you would either make, recommend or install? Would it be...(READ OUT)
- Q.15 (IF 'NO") What would be the <u>most common</u> dimension for such <u>commercial</u> stair risers in <u>millimetres</u> that you would either make, recommend or install? Would it be...(READ OUT)
- Q.16 Do any of your <u>commercial</u> stair risers ever fall <u>outside</u> the dimensions of 150 millimetres to 180 millimetres?
- Q.17 In percentage terms, can you estimate what proportion of your <u>commercial</u> stair risers would fall <u>outside</u> the dimensions of 150 millimetres to 180 millimetres in your case? (IF NECESSARY READ OUT).

		Segments			
	Total	D. 11.1.	A	_	Stair
		Builders	Architects	Designers	Mitr/ins
	(30) %	(4) %	(12) %	%	(9) %
*A 'typical' riser dimension used:					
Yes	66	100	75	62	44
No	32	-	25	31	56
If 'yes', typical riser dimension is	(25)	(4)	(9)	(8)	(4)
150mm – 180mm	80	75	89	88	50
More than 180mm	16	25	11	13	25
Can't say	4	-	-	-	25
If 'no', most common riser dimension is	(13)	(-)	(3)	(5)	(5)
150mm – 180mm	77	-	100	60	80
More than 180mm	8	-	-	20	-
Can't say	15	-	-	20	20
Stair risers ever fall outside 150-180mm?	(30)	(3)	(11)	(10)	(6)
Yes	40	67	36	30	50
No	57	33	64	60	50
Don't know	3	-	-	10	-
**Summary of dimensions used :	(110)	(23)	(31)	(24)	(32)
Always in range of 150mm-180mm	51	70	48	58	34
Not always in range of 150mm-180mm	47	30	48	38	66
Can't say	2	-	3	4	-
Estimated % of risers outside 150-180mm:	(20)	(3)	(5)	(6)	(6)
Under 10%	45	33	80	50	17
10-49%	10	-	-	-	33
Over 50% (55)	30	67	20	33	17
Mean Estimated %	33	52	19	33	38
Don't know	15	-	-	17	33

Source: Detailed Tabular Results Tables 20-24

Notes:

- 1. \*Not asked if use same stair riser dimensions in both residential and commercial buildings.
- 2. \*\* Asked if dimensions are not always in 150-180mm range.
- 3. Summary based on assessing responses to all relevant prior questions (Q 2-Q5, Q12-16) for total applicable sample. Rounding occurs.
- Caution: Some small sample sizes throughout table.
- Any blue or green figures indicate results respectively above or below total sample score to a statistically significant degree to at least the 95% confidence level.
- 6. 2% said "don't know" to Q13.

# 6. Commercial Stair Treads or Goings

- Q.18. Now thinking about the stair treads or goings by which we mean the horizontal length of an individual stair in a <u>commercial</u> building, excluding tapered heads. In your case, is there a <u>typical</u> dimension for <u>commercial</u> stair treads or goings that you make, recommend or install? (by 'typical' we mean a dimension that you use all or most of the time).
- Q.19. (IF "YES") What is the typical dimension for such <u>commercial</u> stair treads or goings in <u>millimetres</u> that you would either make, recommend or install? Would it be...(READ OUT)
- Q.20. (IF "NO") What would be the <u>most common</u> dimension for such <u>commercial</u> stair treads or goings in <u>millimetres</u> that you would either make, recommend or install? Would it be...(READ OUT)
- Q.21. Do any of your commercial stair treads or goings ever fall below 280 millimetres?
- Q.22. In percentage terms, can you estimate what proportion of your <u>commercial</u> stair treads or goings would fall below 280 millimetres in your case? (IF NECESSARY READ OUT).

		Segments				
	Total Sample	Builders	Architects	Designers	Stair Mfr/Ins	
	(45) %	(5) %	(13) %	(15) %	(12) %	
*A 'typical' tread dimension used: Yes	82	100	85	80	75	
No	16	-	15	13	25	
If 'yes', typical tread dimension is	(37)	(5)	(11)	(12)	(9)	
Under 280mm	57	60	27	58	89	
280mm – 355mm	43	40	73	42	11	
If 'no', most common tread dimension is	(8)	(-)	(2)	(3)	(3)	
Under 280mm	13	-	-	-	33	
280mm – 355mm	63	-	100	67	33	
Can't say	25	-	-	33	33	
Stair treads ever fall below 280mm?	(21)	(2)	(10)	(7)	(2)	
Yes	52	50	60	43	50	
No	43	50	30	57	50	
Don't know	5	-	10	-	-	
Summary of dimensions used :	(110)	(23)	(31)	(24)	(32)	
Always in range of 280mm-355mm	17	17	16	25	13	
Not always in range of 280mm-355mm	82	83	81	75	88	
Can't say	1	-	3	-	-	
**Estimated % of treads below 280mm:	(35)	(4)	(9)	(11)	(11)	
Under 10%	23	50	56	9	-	
10-49%	12	-	22	9	9	
Over 50%	57	50	22	64	82	
Mean Estimated %	53	40	28	62	71	
Don't know	9	-	-	18	9	

Source: Detailed Tabular Results Tables 25-30

Notes:

- 1 \*Not asked if use same stair tread dimensions in both residential and commercial buildings.
- 2 \*\* Asked if dimensions are <u>not</u> always in 280-355mm range.
- 3. Summary based on assessing responses to relevant prior questions (Q 7-Q12, Q18-Q21) for total applicable sample.
- 4. Caution: Some small sample sizes throughout table.
- 5. Any blue or green figures indicate results respectively above or below total sample score to a statistically
- significant degree to at least the 95% confidence level.
- 6. 2% said "don't know" to Q18.

# 7. Residential Stair Handrails

PREAMBLE: Now some questions about handrails relating to internal stairways for residential buildings of two stories or more. A handrail can be the top rail of a balustrade or fixed to a wall.

- Q.23. Thinking again about residential stairways, what proportion of those stairways would have a handrail along the full length and to at least one side of the stairway, bearing in mind that there is currently no requirement for a handrail for residential stairways, only a barrier or balustrade? (IF NECESSARY ASK FOR BEST AVERAGE ESTIMATE AND FOR A SINGLE FIGURE, NOT A RANGE).
- Q.24. (IF NOT 100% in Q23 ASK Q24) In those cases where the handrail does not extend the full length of the stairway, would it typically extend for...(READ OUT)

		Segments			
	Total Sample	Builders	Architects	Designers	Stair Mfr/Ins
	(177) %	(57) %	(38) %	(35) %	(47) %
Est. % of stairways with full length handrail:					
None	2	2	5	-	-
1-10%	2	2	6	3	-
11-40%	3	-	3	-	8
41% - 50%	11	14	5	11	13
51% - 80%	5	6	-	6	8
81% - 90%	10	4	13	11	15
91% - 99%	3	4	3	3	4
100% (ALL OF THEM)	59	61	68	60	47
Mean Estimated %	85	87	86	86	83
Don't know	5	9	-	3	4
If 'not 100%', handrail typically extends	(73)	(22)	(12)	(14)	(25)
More than half the stairway length (75)	44	23	33	64	56
About half the length (50)	8	5	-	14	12
Less than half the length (25)	7	5	25	7	-
No handrail at all (0)	26	32	33	14	24
Mean	46	32	34	57	52
Can't say	15	36	8	-	8

Source: Detailed Tabular Results Tables 31-32

Notes:

1 Only asked if involved with residential buildings.

2 Any blue or green figures indicate results respectively above or below total sample score to a statistically significant degree to at least the 95% confidence level.

3 Mean calculations are based on midpoints allocated to the individual range responses such as shown above for Q24.

# Appendix.

- Letter of Authority
- Questionnaire



# **Australian Building Codes Board**



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# LETTER OF AUTHORITY

To Whom It May Concern

This letter is to introduce Di Marzio Research, an independent market research company commissioned to conduct some survey research for the Australian Building Codes Board.

The research is about identifying current design and construction practice in regard to stair riser and going dimensions and the provision of handrails. The research will contribute to proposals to change the national Building Code of Australia to reduce the incidence of slips, trips and falls in buildings. The survey research is being undertaken by telephone with randomly selected organisations in your industry.

All survey responses are confidential and no names of individual respondents will be disclosed in connection with any of the findings from the study.

Di Marzio Research has designed the research and will report the findings, but you have been contacted on their behalf by a specialist telephone interviewing organisation called MarketMetrics. Both these organisations operate under the Code of Professional Behaviour required by the Australian Market & Social Research Society and also strictly follow the provisions of the Privacy Act.

Should you wish to check the bona fides of Di Marzio Research or MarketMetrics, or if you have further questions about the research project, please contact Ron De Veer, ABCB Project Manager on 07 3821 7308 or alternatively email Ron.DeVeer@abcb.gov.au.

I would greatly appreciate if you would assist the researchers from Di Marzio Research and MarketMetrics.

Yours sincerely

Mr/Brian Ashe Manager Australian Building Codes Board

12 February 2010

Building Australia's Future Classification

# ABCB QUESTIONNAIRE STAIRS AND HANDRAILS SURVEY (FINAL)

#### A: RESPONDENT SEGMENTS AND QUOTAS:

- THIS SURVEY IS TO BE CONDUCTED WITH <u>200</u> PROFESSIONALS IN THE BUILDING AND DESIGN INDUSTRY FROM MELBOURNE, SYDNEY, BRISBANE AND PERTH.
- IT IS ABOUT STAIRS AND HANDRAILS IN RESIDENTIAL AND COMMERCIAL BUILDINGS. THERE ARE SOME PROPOSED CHANGES TO THE BUILDING CODE OF AUSTRALIA ABOUT VERTICAL AND HORIZONTAL STAIR DIMENSIONS AND THE INTRODUCTION OF HANDRAILS TO RESIDENTIAL AREAS OF BUILDINGS. THE ABCB WANTS TO DETERMINE WHAT CURRENT INDUSTRY PRACTICE IS REGARDING SUCH STAIR DIMENSIONS AND VOLUNTARY TAKE-UP OF HANDRAILS.
- THERE ARE <u>VARIOUS SEGMENTS</u> REQUIRED WITH ROUGH QUOTAS (50 IN EACH SEGMENT) SHOWN BELOW BUT A MINIMUM OF 30 INTERVIEWS IN ANY ONE SEGMENT IS REQUIRED OVERALL.
- BUILDERS, ARCHITECTS AND DESIGNERS WILL BE SOURCED FROM THE BCA SUBSCRIBER LIST AND STAIR MANUFACTURERS / INSTALLERS FROM THE YELLOW PAGES

SEGMENT	Total No.
BUILDERS	50
ARCHITECTS	50
DESIGNERS	50
STAIR MANUFACTURERS / INSTALLERS	50
TOTAL	200

# **B: STATE QUOTAS:**

	PERTH	(40) 4
	BRISBANE	(40) 3
	SYDNEY	(60) 2
(ROUGH QUOTAS IN BRACKETS)	MELBOURNE	(60) 1

#### C: SAMPLE SOURCE

ABCB LISTS (OLD OR NEW)	. 1
OTHER SOURCES	. 2

# INTRODUCTION:

GOOD ...... MY NAME IS ..... FROM MARKETMETRICS CALLING ON BEHALF OF DI MARZIO RESEARCH, AN INDEPENDENT MARKET RESEARCH COMPANY BASED IN MELBOURNE. WE ARE CONDUCTING A SHORT SURVEY FOR **THE AUSTRALIAN BUILDING CODES BOARD** WITH ORGANISATIONS INVOLVED IN BUILDING AND DESIGN. THE SURVEY IS CONCERNED WITH PROPOSED CHANGES TO THE BUILDING CODE OF AUSTRALIA REGARDING STAIRS AND HANDRAILS AND THE BOARD WANTS FEEDBACK ON CURRENT INDUSTRY PRACTICE. THIS SURVEY SHOULD TAKE 10 MINUTES OR EVEN LESS.

IF NECESSARY, ADD: I HAVE A LETTER OF AUTHORITY FROM THE ABCB I COULD EMAIL OR FAX TO YOU.

#### ASK SCREEN 1 OF ALL.

S1.	MAY I SPEAK TO THE PERSON THERE WHO WOULD	(CONTINUE)	YES1
	HAVE MOST TO DO WITH DESIGN, MANUFACTURE	(CALL BACK)	NOT AVAILABLE2
	OR INSTALLATION OF STAIRS OR HANDRAILS IN	(CLOSE)	REFUSAL3
	RESIDENTIAL OR COMMERCIAL BUILDINGS?	(CLOSE)	NOT APPLICABLE TO STAIRS4

# RE-INTRODUCE IF NECESSARY

WOULD IT BE	CONVENIENT TO	INTERVIEW	YOU	(CONTINUE)	YES, NOW1
NOW?				(CALL BACK DETAILS)	YES, BUT LATER2
				(CLOSE)	NO3

## CALL BACK DETAILS:

NAME:	
PHONE NUMBER:	
TIME:	•••

(IF NECESSARY: RE-INTRODUCE.)

## CONFIDENTIALITY:

PLEASE BE ASSURED THAT ALL THE INFORMATION AND OPINIONS YOU PROVIDE WILL BE USED ONLY FOR RESEARCH PURPOSES AND WE ABIDE BY THE PRINCIPLES OF THE PRIVACY ACT. WHILE WE'D PREFER YOU TO ANSWER ALL THE QUESTIONS, IF THERE ARE ANY YOU'D RATHER NOT ANSWER, THAT'S FINE. JUST LET ME KNOW.

IF YOU WOULD LIKE TO CHECK ON OUR COMPANY, YOU COULD CALL THE MARKET RESEARCH SOCIETY SURVEY LINE ON 1300 364 830.

## MONITORING CLAUSE:

MY SUPERVISOR MAY BE MONITORING THIS INTERVIEW FOR QUALITY CONTROL PURPOSES. IF YOU DO NOT WISH THIS TO OCCUR, PLEASE LET ME KNOW.

# SAMPLING AND QUOTA CHECKING QUESTION:

# ASK ALL

SC.	FOR THIS SURVEY, WE NEED TO OBTAIN A
	CERTAIN NUMBER OF INTERVIEWS WITH PEOPLE
	FROM PARTICULAR TYPES OF ORGANISATIONS.
	CAN I PLEASE CHECK WHICH OF THESE
	CATEGORIES YOUR ORGANISATION FALLS INTO?
	(READ OUT. MULTIPLES OK).
	NOTE: IF MORE THAN ONE – CATEGORISE
	ACCORDING TO WHAT QUOTAS MOST NEED TO BE
	FILLED

	BUILDERS	1
	ARCHITECTS	2
	DESIGNERS	3
	STAIR MANUFACTURERS/INSTALLERS	54
(DO NOT READ)	(OTHER)	5

QA.	FIRSTLY, CAN I CHECK IF YOUR WORK IS ON		RESIDENTIAL ONLY1
	RESIDENTIAL OR COMMERCIAL BUILDINGS OR		COMMERCIAL ONLY2
	BOTH?		BOTH3
		(CLOSE)	NEITHER4

## INSTRUCTIONS

IF RESIDENTIAL ONLY (CODE 1 IN QA) ASK SECTION A & C QUESTIONS

IF COMMERCIAL ONLY (CODE 2 IN QA) ASK ONLY SECTION B QUESTIONS

IF BOTH RESIDENTIAL AND COMMERCIAL (CODE 3 IN QA) ASK SECTION A B & C QUESTIONS

# STAIR RISERS AND TREADS / GOINGS FOR RESIDENTIAL BUILDINGS

## PREAMBLE:

I NEED TO ASK YOU SOME QUESTIONS ABOUT INTERNAL AND EXTERNAL STAIRWAYS FOR **RESIDENTIAL BUILDINGS** OF TWO STORIES OR MORE. WE ARE ALSO ONLY INTERESTED IN STRAIGHT STAIRS NOT CURVED OR SPIRAL STAIRS. (IF RESPONDENT SAYS ONLY WORK ON CURVED OR SPIRAL STAIRS, (THANK AND CLOSE).

THE FIRST SET OF QUESTIONS IS ABOUT **STAIR RISERS** BY WHICH WE MEAN THE VERTICAL HEIGHT OF AN INDIVIDUAL STAIR IN A **RESIDENTIAL** BUILDING.

Q2. IN YOUR CASE, IS THERE A <u>TYPICAL</u> DIMENSION FOR RESIDENTIAL STAIR RISERS THAT YOU EITHER MAKE, RECOMMEND OR INSTALL? (IF NECESSARY ADD: BY 'TYPICAL' WE MEAN A DIMENSION THAT YOU USE ALL OR MOST OF THE TIME).

#### IF YES IN Q2, ASK Q.3, OTHERWISE GO TO Q.4

Q3. WHAT IS THE TYPICAL DIMENSION FOR SUCH RESIDENTIAL STAIR RISERS IN <u>MILLIMETRES</u> THAT YOU WOULD EITHER MAKE, RECOMMEND OR INSTALL? WOULD IT BE...(*READ OUT*)

#### IF NO OR DON'T KNOW IN Q2, ASK Q.4

Q4. WHAT WOULD BE THE <u>MOST COMMON</u> DIMENSION FOR SUCH RESIDENTIAL STAIR RISERS IN <u>MILLIMETRES</u> THAT YOU WOULD EITHER MAKE, RECOMMEND OR INSTALL? WOULD IT BE...(*READ OUT*) (Q.6) YES .....1

NO .....2

(DON'T KNOW) ..... D

(Q.7)

(Q.7)

#### ASK ALL IN RESIDENTIAL SEGMENT WHO SAID CODE 2 IN Q3 OR Q4 OTHERWISE GO TO Q6

Q5. DO ANY OF YOUR RESIDENTIAL STAIR RISERS EVER FALL <u>OUTSIDE</u> THE DIMENSIONS OF 150 MILLIMETRES TO 180 MILLIMETRES?

#### IF YES IN Q5, OR NOT CODE 2 IN Q3 OR Q4 ASK Q.6, OTHERWISE GO TO Q.7

Q6.	IN PERCENTAGE TERMS, CAN YOU ESTIMATE
	WHAT PROPORTION OF YOUR RESIDENTIAL STAIR
	RISERS WOULD FALL OUTSIDE THE DIMENSIONS
	OF 150 MILLIMETRES TO 180 MILLIMETRES IN YOUR
	CASE? (IF NECESSARY READ OUT)

UNDER 10%	.1
10-19%	.2
20-29%	.3
30-39%	.4
40-49%	.5
OVER 50%	.6
DON'T KNOW / CAN'T SAY	D

DON'T KNOW / CANT SAY D
UNDER 150MM 1

UNDER 150MM ......1

BETWEEN 150MM AND 180MM ......2

(Q.3)	YES	1
(Q.4)	NO	2
(Q.4)	(DON'T KNOW)	. D

Q7. NOW SOME QUESTIONS ABOUT THE **STAIR** TREADS OR GOINGS BY WHICH WE MEAN THE HORIZONTAL LENGTH OF AN INDIVIDUAL STAIR IN A <u>RESIDENTIAL</u> BUILDING.

> IN YOUR CASE, IS THERE A **TYPICAL** DIMENSION FOR RESIDENTIAL STAIR TREADS OR GOINGS THAT YOU EITHER MAKE, RECOMMEND OR INSTALL? (IF NECESSARY ADD: BY 'TYPICAL' WE MEAN A DIMENSION THAT YOU USE ALL OR MOST OF THE TIME).

## IF YES IN Q7, ASK Q.8, OTHERWISE GO TO Q.9

**Q8.** EXCLUDING TAPERED TREADS, WHAT IS THE TYPICAL DIMENSION FOR SUCH <u>RESIDENTIAL</u> STAIR TREADS OR GOINGS IN <u>MILLIMETRES</u> THAT YOU WOULD EITHER MAKE, RECOMMEND OR INSTALL? WOULD IT BE...(*READ OUT FIRST 2 RESPONSES ONLY*)

## IF NO OR DON'T KNOW IN Q7, ASK Q9.

Q9. WHAT WOULD BE THE <u>MOST COMMON</u> DIMENSION FOR SUCH <u>RESIDENTIAL</u> STAIR TREADS OR GOINGS IN <u>MILLIMETRES</u> THAT YOU WOULD EITHER MAKE, RECOMMEND OR INSTALL? WOULD IT BE...(*READ OUT FIRST 2 RESPONSES ONLY*)

# ASK ALL IN RESIDENTIAL SEGMENT WHO SAID CODE 2 IN Q8 OR Q9 OTHERWISE GO TO Q11

Q10. DO ANY OF YOUR RESIDENTIAL STAIR TREADS OR GOINGS EVER FALL <u>BELOW</u> 280 MILLIMETRES? (Q.9) (DON'T KNOW) ..... D

YES .....1

NO .....2

(Q.8)

(Q.9)

	UNDER 280MM	1
	BETWEEN 280MM AND 355MM	2
DON'T READ OUT	(MORE THAN 355MM)	3
DON'T READ OUT	(DON'T KNOW / CANT SAY)	. D

(Q.11)	YES1
(Q.12)	NO2
(Q.12)	(DON'T KNOW) D

# IF YES IN Q10, OR NOT CODE 2 IN Q8 OR Q9 ASK Q.11, OTHERWISE CHECK INSTRUCTIONS AND GO TO NEXT APPROPRIATE SECTION

- Q11. IN PERCENTAGE TERMS, CAN YOU ESTIMATE WHAT PROPORTION OF YOUR RESIDENTIAL STAIR TREADS OR GOINGS WOULD FALL <u>BELOW</u> 280 MILLIMETRES IN YOUR CASE? (IF NECESSARY READ OUT).

# SECTION B: COMMERCIAL STAIR RISERS AND TREADS FOR COMMERCIAL BUILDINGS

## PREAMBLE:

THIS SET OF QUESTIONS RELATE TO INTERNAL STAIRWAYS FOR **COMMERCIAL AND/OR PUBLIC BUILDINGS** OF TWO STORIES OR MORE. WE ARE ALSO ONLY INTERESTED IN STRAIGHT STAIRS, INCLUDING FIRE ISOLATED STAIRS BUT NOT CURVED OR SPIRAL STAIRS. (THANK AND CLOSE).

## INSTRUCTIONS

IF COMMERCIAL ONLY (CODE 2 AT Q.A) ADD SENTENCE IN *ITALICS* BELOW AND GO TO Q.13. IF BOTH RESIDENTIAL AND COMMERCIAL (CODE 3 AT Q.A) SKIP THIS SENTENCE AND GO TO Q.12

THESE QUESTIONS ARE ABOUT **STAIR RISERS** BY WHICH WE MEAN THE VERTICAL HEIGHT OF AN INDIVIDUAL STAIR IN A <u>COMMERCIAL</u> BUILDING.

- Q12. ARE THE DIMENSIONS OF YOUR STAIR **RISERS & TREADS ARE TYPICALLY THE SAME FOR** RESIDENTIAL & COMMERCIAL ......1 RISERS AND TREADS IN COMMERCIAL NEXT SECTION RISERS ARE THE SAME BUT TREADS DIFFER ......2 PROPERTIES, TYPICALLY THE SAME AS Q.18 THE DIMENSIONS YOU USE IN RESIDENTIAL PROPERTIES OR DO BOTH TREADS AND RISERS DIFFER BETWEEN THOSE RISER AND TREAD DIMENSIONS DIFFER BETWEEN RESIDENTIAL AND Q.13 (DON'T KNOW) ..... D COMMERCIAL? (IF NECESSARY READ OUT TO CLARIFY)
- Q13. IN YOUR CASE, IS THERE A <u>TYPICAL</u> DIMENSION FOR COMMERCIAL STAIR RISERS THAT YOU EITHER MAKE, RECOMMEND OR INSTALL? (IF NECESSARY ADD: BY 'TYPICAL' WE MEAN A DIMENSION THAT YOU USE ALL OR MOST OF THE TIME).

## IF YES IN Q13, ASK Q.14, OTHERWISE GO TO Q.15

Q14. WHAT IS THE TYPICAL DIMENSION FOR SUCH COMMERCIAL STAIR RISERS IN <u>MILLIMETRES</u> THAT YOU WOULD EITHER MAKE, RECOMMEND OR INSTALL? WOULD IT BE...(*READ OUT*)

#### IF NO OR DON'T KNOW IN Q13, ASK Q.15

Q15. WHAT WOULD BE THE <u>MOST COMMON</u> DIMENSION FOR SUCH COMMERCIAL STAIR RISERS IN <u>MILLIMETRES</u> THAT YOU WOULD EITHER MAKE, RECOMMEND OR INSTALL? WOULD IT BE...(*READ OUT*) (Q.14) YES .....1

(Q.15) NO ......2

(Q.15) (DON'T KNOW)......D

1
2
3
D

#### ASK ALL WHO ANSWERED Q.13 AND GAVE CODE 2 IN Q14 OR Q15 OTHERWISE GO TO Q17

Q16.	DO ANY OF YOUR COMMERCIAL STAIR RISERS	(Q.17)	YES1
	EVER FALL <b>OUTSIDE</b> THE DIMENSIONS OF 150	(Q.18)	NO2
	MILLIMETRES TO 180 MILLIMETRES?	(Q.18)	(DON'T KNOW) D

## IF YES IN Q.16 OR NOT CODE 2 IN Q14 OR Q15 ASK Q.17, OTHERWISE GO TO Q.18

- Q17. IN PERCENTAGE TERMS, CAN YOU ESTIMATE WHAT PROPORTION OF YOUR COMMERCIAL STAIR RISERS WOULD FALL <u>OUTSIDE</u> THE DIMENSIONS OF 150 MILLIMETRES TO 180 MILLIMETRES IN YOUR CASE? (IF NECESSARY READ OUT)

YES .....1

NO .....2

(DON'T KNOW) ..... D

UNDER 280MM......1

(MORE THAN 355MM)......3

(DON'T KNOW / CANT SAY) ..... D

## CHECK: IF COMMERCIAL ONLY OR IF CODE 2 OR 4 OR D IN Q.12, ASK Q.18. IF CODE 3 IN Q12, GO TO NEXT SECTION

(Q.19)

(Q.20)

(Q.20)

DON'T READ OUT

DON'T READ OUT

Q18. NOW THINKING ABOUT THE **STAIR TREADS OR** GOINGS BY WHICH WE MEAN THE HORIZONTAL LENGTH OF AN INDIVIDUAL STAIR IN A <u>COMMERCIAL</u> BUILDING EXCLUDING TAPERED TREADS.

> IN YOUR CASE, IS THERE A **TYPICAL** DIMENSION FOR **COMMERCIAL** STAIR TREADS OR GOINGS THAT YOU EITHER MAKE, RECOMMEND OR INSTALL ? (*IF NECESSARY ADD: BY 'TYPICAL' WE MEAN A DIMENSION THAT YOU USE ALL OR MOST OF THE TIME*).

#### IF YES IN Q18, ASK Q.19, OTHERWISE GO TO Q.20

Q19. WHAT IS THE TYPICAL DIMENSION FOR SUCH <u>COMMERCIAL</u> STAIR TREADS OR RISERS IN <u>MILLIMETRES</u> THAT YOU WOULD EITHER MAKE, RECOMMEND OR INSTALL? WOULD IT BE...(*READ OUT*)

#### IF NO OR DON'T KNOW IN Q18, ASK Q20.

 Q20.
 WHAT WOULD BE THE MOST COMMON DIMENSION

 FOR SUCH COMMERCIAL STAIR TREADS OR

 GOINGS IN MILLIMETRES THAT YOU WOULD
 DON'T READ OUT

 EITHER MAKE, RECOMMEND OR INSTALL? WOULD
 DON'T READ OUT

 IT BE...(READ OUT)
 IT BE...(READ OUT)

	UNDER 280MM	1
	BETWEEN 280MM AND 355MM	2
ON'T READ OUT	(MORE THAN 355MM)	3
ON'T READ OUT	(DON'T KNOW / CANT SAY)	. D

# ASK ALL WHO ANSWERED Q.18 AND GAVE CODE 2 IN Q19 OR Q20 OTHERWISE GO TO Q22

Q21.	DO ANY OF YOUR <u>COMMERCIAL</u> STAIR TREADS OR	(Q.22)	YES1
	GOINGS EVER FALL BELOW 280 MILLIMETRES?	NEXT SECTION	NO2
		NEXT SECTION	(DON'T KNOW) D

# IF YES IN Q21, OR NOT CODE 2 IN Q19 OR Q20 ASK Q.22, OTHERWISE CHECK Q.A AND GO TO NEXT SECTION

- Q22. IN PERCENTAGE TERMS, CAN YOU ESTIMATE WHAT PROPORTION OF YOUR COMMERCIAL STAIR TREADS OR GOINGS WOULD FALL **BELOW** 280 MILLIMETRES IN YOUR CASE? (IF NECESSARY READ OUT).
- UNDER 10%.....1 10-19% ......2 OVER 50% ......6 DON'T KNOW / CAN'T SAY ...... D

2

# SECTION C: RESIDENTIAL HANDRAILS FOR RESIDENTIAL BUILDINGS

## CHECK: IF COMMERCIAL ONLY (CODE 2 AT Q.A) GO TO CLASSIFICATION SECTION OTHERWISE ASK SECTION C.

# PREAMBLE:

NOW SOME QUESTIONS ABOUT HANDRAILS RELATING TO INTERNAL STAIRWAYS FOR RESIDENTIAL BUILDINGS OF TWO STORIES OR MORE. A HANDRAIL CAN BE THE TOP RAIL OF A BALUSTRADE OR FIXED TO A WALL.

RESIDENTIAL CLASSIFICATION 100% (ALL) ......1 Q23. THINKING AGAIN ABOUT STAIRWAYS, WHAT PROPORTION OF THOSE Q.24 OTHER (WRITE IN) Q.24 DON'T KNOW / CAN'T SAY ...... D STAIRWAYS WOULD HAVE A HANDRAIL ALONG THE FULL LENGTH AND TO AT LEAST ONE SIDE OF THE STAIRWAY BEARING IN MIND THAT THERE IS CURRENTLY NO REQUIREMENT FOR A HANDRAIL FOR RESIDENTIAL STAIRWAYS, ONLY A BARRIER OR BALUSTRADE? (IF NECESSARY: ASK FOR BEST AVERAGE ESTIMATE AND FOR A SINGLE FIGURE NOT A RANGE).

# IF NOT 100% (CODE 1) IN Q23, ASK Q.24, OTHERWISE GO TO CLASSIFICATION

Q24.	IN THOSE CASES WHERE THE HANDRAIL DOES	MORE THAN HALF THE STAIRWAY LENGTH 1
	NOT EXTEND THE FULL LENGTH OF THE	OR ABOUT HALF THE STAIRWAY LENGTH
	STAIRWAY, WOULD IT TYPICALLY EXTEND FOR	OR LESS THAN HALF ITS LENGTH
	(READ OUT)	OR WOULD THERE BE NO HANDRAIL AT ALL 4
		DON'T KNOW / CAN'T SAYD

## **CLASSIFICATION QUESTIONS**

NOW I WOULD LIKE TO FINISH OFF WITH SOME QUESTIONS ABOUT YOU SO WE CAN COMPARE THE RESPONSES TO THIS SURVEY BY DIFFERENT TYPES OF SUBSCRIBERS.

Α.	GENDER: (RECORD)	MALE 1
		FEMALE2
В.	NUMBER OF EMPLOYEES IN COMPANY:	ONE1
	HOW MANY FULL-TIME EMPLOYEES WORK IN	2-32
	YOUR ORGANISATION THROUGHOUT AUSTRALIA?	4-53
	(READ OUT)	6-104
		11-205
		21-506
		50+7
		(UNKNOWN)8

## **CLOSING SCRIPT.**

THAT'S THE END OF THE INTERVIEW. AS THIS IS MARKET RESEARCH, IT IS CARRIED OUT IN COMPLIANCE WITH THE PRIVACY ACT AND THE INFORMATION YOU HAVE PROVIDED WILL ONLY BE USED FOR RESEARCH PURPOSES.

THANK YOU VERY MUCH FOR YOUR COOPERATION WITH OUR SURVEY.

IN CASE MY SUPERVISOR NEEDS TO CONTACT YOU TO CHECK THE VALIDITY OF THIS INTERVIEW, COULD I PLEASE ASK FOR YOUR NAME? (DO NOT ENTER THE NAME UNTIL YOU HANG UP.)

AND CAN I JUST CONFIRM THE PHONE NUMBER I HAVE CALLED? (READ OUT)

IF NECESSARY: CHECK OR ASK FOR DETAILS TO SEND LETTER OF AUTHORITY

NAME: .....

FAX NUMBER: .....

OR

EMAIL: .....

IN CASE YOU MISSED IT EARLIER, MY NAME IS ...... FROM MARKETMETRICS, CALLING ON BEHALF OF DI MARZIO RESEARCH. IF YOU WOULD LIKE TO CHECK THE VALIDITY OF THIS STUDY YOU CAN CALL US ON (03) 8781 5777.

# THANK YOU AGAIN FOR YOUR TIME.

I HEREBY CERTIFY THAT THIS IS AN ACCUI	RATE AND COMPLETE INTERVIEW, TAKEN IN A	CCORDANCE WITH MY		
INSTRUCTIONS AND THE ICC/ESOMAR INTERNATIONAL CODE.				
NAME:	SIGNATURE:	DATE:		