



ACCESSIBILITY AUDIT for

Report No.
B - 1.1(E)

Non-residential Facilities

Deficiencies summarised by
Attributes

Authority Rank E (BCA, ACB, ANAP etc.)

produced with



automated compliance
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Guidance on using this report is provided at the end.

Report summary

This report is one of eight reports summarising deficiencies in terms of Attributes.

Four of the reports identify Priority 1 deficiencies, and four identify Priority 5 deficiencies. Each set of four reports are comprised of two related to residential facilities and two related to non-residential facilities. Each set of two reports includes one that summarise deficiencies based on a 5% relaxation of dimensional criteria.

The information is virtually identical in each report, differing primarily only in the instances of deficiencies and their estimated rectification costs.

Including this one, the reports are:

- A-1.1(A) Priority 1, Non-residential Facilities
- A-1.2(A) Priority 1, Non-residential Facilities, with 5% relaxation of dimensional criteria
- A-2.1(A) Priority 1, Residential Facilities
- A-2.2(A) Priority 1, Residential Facilities, with 5% relaxation of dimensional criteria
- B-1.1(E) Priority 5, Non-residential Facilities
- B-1.2(E) Priority 5, Non-residential Facilities, with 5% relaxation of dimensional criteria
- B-2.1(E) Priority 5, Residential Facilities
- B-2.2(E) Priority 5, Residential Facilities, with 5% relaxation of dimensional criteria.

Priority 1 refers to matters addressed by the BCA. Priority 5 refers to matters addressed by the BCA, ACB, ANAP, other recognised guides and the opinion of the auditor. Explanation about Priorities is given in 'Guide to this Report' at the end of this report

The purpose of the reports is to convey the general nature of deficiencies, the relative magnitude of their occurrence and approximate rectification costs, and possible bases for establishing a staged rectification program.

The intended readers are program management personnel rather than facilities management personnel because, it is anticipated, the former will have less need for detail about deficiencies than the latter. It is for this reason that deficiencies are identified in this report in terms of "attributes" instead of "locations" or "features".

5% relaxation

The purpose of the 5% relaxation of dimensional criteria of compliance is to assist in identifying rectifications that might feasibly be carried before others with respect to a limited rectification budget.

The 5% relaxation is not presented here as a recommendation, it should be treated with caution, and it should not be construed as signifying that features excluded by the 5% relaxation need not be rectified. Nor does it necessarily follow that to exclude some features from a rectification schedule is necessarily efficient. For example, it may be more cost-effective to rectify all doorways in a building at the outset than to rectify, say, 80% at the outset and the "excused" 20% later. Moreover, the relaxation is not distributed across all criteria because not all criteria are dimensional.

Instances Of the 10 attributes, the most numerous, expressed as a proportion of all deficiencies are:

- a. Cognisability: 28% (1,319);
- b. Wheelability: 24% (1,114);
- c. Balance Support: 18% (851) and
- d. Operability: 17% (808).

The remainder, in order of proportionate contribution, are:

Safety (5%), Refreshments (3%), Personal Amenity (2%), Emergency Egress (2%) Emergency Egress (1%), Services (1%) and Sufficiency (<1%).

As indicated below, relative prevalence of a deficiency does not necessarily correspond with relative expensiveness of rectification cost.

The total number of deficiencies for Priority Rank E (BCA, ACB, ANAP etc.) is 4,682.

Estimated rectification costs The estimated rectification cost for all attributes is approx. \$2,880,400 - \$10,513,900. The most expensive rectifications, expressed as an approximate proportion of the total rectification cost, are for:

- Wheelability: 53% (\$1,664,000 - \$5,409,000)
- Operability: 12% (\$164,000 - \$1,380,000)
- Emergency Egress: 12% (\$144,000 - \$1,423,000)

The remainder, in descending order of proportionate cost, are:

Balance Support (8%), Safety (5%), Sufficiency (4%), Cognisability (3%), and Refreshments (2%). Personal Amenity and Services each constitute 1% or less.

Prioritisation

Deferment Prioritisation in terms of Deferment Option only

- Immediate rectification is indicated for 22% of deficiencies, at 30% of the total cost (i.e. \$918,350 - \$3,076,800);
- No longer than short term deferment is indicated for 5% of rectifications, at 6% of the total cost (i.e. \$172,100 - \$693,850);
- No longer than medium term deferment is indicated for 56% of rectifications, at 42% of the total cost (i.e. \$1,174,025 - \$4,495,350)

Occupancy Prioritisation in terms of Occupancy only

Of the rectifications required,

- 47% are for areas available to anyone (public, students, staff), i.e. "public" areas, at 35% of the total rectification cost (i.e. \$1,138,175 - \$3,607,250);
- 29% are for student areas, at 34% of the total cost (i.e. \$848,950 - \$3,655,250);
- 23% are for staff areas, at 30% of the total cost (i.e. \$867,600 - \$3,134,150)

Priority Group, Occupancy and Deferment ● 5% associated with staff areas, at a cost of 10% of the total cost (i.e. \$250,000 - \$909,500).

Balance support (grab rails and hand rails)

Nearly all of the 1167 deficiencies relate to hand rails (755 deficiencies), not grab rails. This is to be expected because hand rails are much more prevalent on the campus whereas there is a very small number of sanitary facilities that require grab rails.

The most prevalent balance support deficiencies are: incorrect handrail or grab rail cross-sectional shape or size (60% of instances); hand rail ends not continuing past the ends of steps/stairs or ramps, or not being curved down or to the side (17% of instances).

The other deficiencies are comprised of incorrectly-configured grab rails, incorrectly located grab rails or hand rails, and hand rails not being continuous for the whole flight or around landings.

Prioritisation	Deficiencies warranting immediate rectification comprise 38% of Balance Support deficiencies, with short term deferment for 4% and medium term deferment for approx. 53% possibly being feasible.
Cognisability	The most prevalent of the 1319 Cognisability deficiencies are associated with signs (1027 instances), steps and stairways (156 instances) and doorways (96 instances).
Prioritisation	Deficiencies warranting immediate rectification comprise 6% of Cognisability deficiencies, with short term deferment for 2% and medium term deferment for 91% possibly being feasible.
Emergency Egress	<p>Of the 74 emergency egress deficiencies, 39 relate to defective exit signs, 5 relate to obstructed exit paths, and 28 relate to absent evacuation waiting areas.</p> <p>Consideration of emergency egress is ancillary to the accessibility report, not the result of a dedicated emergency egress audit. The emergency egress deficiencies itemised here should therefore be regarded as under-reported.</p> <p>Features not considered include the nature and location of emergency evacuation diagrams and instructions, and distances of travel to exits (which are a requirement under the BCA).</p> <p>Evacuation waiting areas are not a requirement of the BCA nor the proposed ACB.</p>
Prioritisation	The greatest proportion of deficiencies are associated with Public areas (43% of Emergency Egress deficiencies) and Student areas (42%) at 26% and 64% respectively of the Emergency Egress rectification costs. However, rectification should be effected regardless of type of occupancy.
Operability	Almost all of the 808 Operability deficiencies recorded are associated with doorways (736 instances).
Prioritisation	<p>Deficiencies warranting immediate rectification comprise 29% of Balance Support deficiencies, with short term deferment for 20%, medium term deferment for 43%, and 7% for long term deferment possibly being feasible.</p> <p>The greatest proportion of deficiencies are associated with Public areas (49% of Operability deficiencies) and Student areas (43%), at 30% and 38% respectively of the Operability rectification costs.</p>
Personal Amenity	<p>The most prevalent of the 111 Personal Amenity deficiencies are associated with fittings in sanitary facilities and showers.</p> <p>Most deficiencies relate to fittings that are insufficiently reachable (75 [59% + 16%]), fittings that have not been supplied (14%), or fittings (such as shower seats) that are difficult to use (9%).</p>
Prioritisation	<p>Deficiencies warranting immediate rectification comprise 63% of Personal Deficiencies warranting immediate rectification comprise 63% of Personal Amenity deficiencies, with short term deferment for 13% and medium term deferment for 18% possibly being feasible.</p> <p>The greatest proportion of deficiencies are associated with Public areas (79% of Personal Amenity deficiencies) at 71% of the Personal Amenity rectification cost.</p>
Refreshments	The 119 deficiencies are related to Kitchens. Of these, 67% relate to difficulty of reach, and 33% relate to useability (including lack of space under benches).
Prioritisation	<p>Deficiencies for which medium term deferment may be feasible comprise 23% of Refreshments deficiencies, with 77% for long term deferment possibly being feasible.</p> <p>The greatest proportion of deficiencies are associated with Staff areas (77% of Refreshments deficiencies) and Student areas (20%) at 79% and 18% respectively of the estimated Refreshments rectification cost.</p>

Safety	<p>Most of the 221 hazards are associated with glazing at doorways (154 instances [86 + 68]). The other hazards are associated with steps and stairways, and external accessways (tabulated as "Hazards" in the body of this report).</p> <p>The predominant types of hazards are impact hazards (80%) and trip hazards (20%).</p> <p>Consideration of hazards is ancillary to the accessibility report, not the result of a dedicated safety audit. The hazards itemised here should therefore be regarded as under-reported.</p>
Prioritisation	<p>The greatest proportion of deficiencies are associated with Public areas (88%) at 39% of the Safety rectification cost. However, rectification should be effected regardless of type of occupancy.</p> <p>Because Occupancy and Deferment are based on whole rooms/spaces within buildings, they do not accurately extend to features within the spaces. Consequently, all Safety rectifications should be regarded as requiring immediate rectification.</p>
Services	<p>Services deficiencies are associated with service counters, of which there are 55 instances:- 25 are related to absent or insufficient space under for seated people and 30 to counter tops that are too high for use by seated people.</p>
Prioritisation	<p>55% of deficiencies warrant immediate rectification, with short-term deferment for 24%, medium term deferment for 11%, and long term deferment for 11% possibly being feasible.</p> <p>75% of the deficiencies are in public areas, 15% in Student areas, and 11% are in Staff areas.</p>
Sufficiency	<p>The sufficiency category relates to wheelchair accessible toilets, lifts and signs, for which there are 13 instances.</p>
Prioritisation	<p>Deficiencies warranting immediate rectification comprise 57% of Sufficiency deficiencies, with medium term deferment for 29% possibly being feasible.</p> <p>The greatest proportion of deficiencies are associated with Public areas (57% of Sufficiency deficiencies) and Student areas (29%), at 90% and 10% respectively of the Sufficiency rectification costs.</p>
Wheelability	<p>The 1,114 Wheelability deficiencies relate primarily to doorways (1,014 deficiencies), sanitary facilities, inclined accessways ("ramps" and "walkways") and kerb ramps, and internal and external accessways (including grates on accessways).</p> <p>49% of deficiencies relate to spaces that are too small (including too narrow) and 46% relate to surfaces that are insufficiently trafficable.</p>
Prioritisation	<p>Deficiencies warranting immediate rectification comprise 46% of Wheelability deficiencies, with short term deferment for 6%, 23% for medium term and 26% for long term deferent possibly being feasible.</p> <p>The greatest proportion of deficiencies are associated with Public areas (49% of Wheelability deficiencies), Staff areas (26%) and Student areas (26%), at 32%, 40% and 26% respectively of the Wheelability rectification cost.</p>
Notes	
Explanation of terms; Guide to report	<p>Explanation of terms and guidance on using this report is provided in the concluding section "Guide to this Report".</p>

Item Feature
No.

No. of
Instances

BalanceSupport

1.	Accessway: HAND RAILS	
1.	Clearance between LHS hand rail and wall/support insufficient (< 50 mm)	19
2.	Continuity: No horizontal end-continuation of RHS hand rail at bottom landing	162
3.	Continuity: LHS hand rail (in direction of ascent) is not continuous around flight	28
4.	Cross-sectional shape: RHS hand rail is not circular for at least its top 270°	422
5.	Continuity: RHS hand rail (in direction of ascent) does not allow a 270° clear grip for its whole length	61
6.	Cross-sectional size: Diameter of RHS hand rail (in direction of ascent) is too large (> 50 mm.)	28
7.	Safety: Hazard of no hand rail on RHS is greater because of absence of wall or balustrade	21
8.	Height: RHS hand rail is too high above tread nosings line (> 1000 mm)	11
9.	Z: Other deficiency or comment	3
	Total:	755
2.	Accessway: STEPS, STAIRWAYS	
1.	Hand rail on RHS of flight is absent	7
	Total:	7
3.	Sanitary facility: GRAB RAILS AT SHOWER	
1.	Vertical grab rail/shower head rail is absent	1
2.	Horizontal grab rail starts too close to the adjacent wall with the shower seat	6
	Total:	7
4.	Sanitary facility: GRAB RAILS AT TOILET PAN	
1.	Side grab rail: vertical part does not extend to a height of 1400 mm	4
2.	Rear grab rail is too low (< 800 mm)	78
	Total:	82