

July 12, 201X

Ms. Client Name Client Address Toronto, Ontario M#M #M#

Dear Ms. Client Name:

The enclosed barrier-free compliance report has been prepared to provide pertinent technical information about the property at 123 Inspection Road, Toronto, Ontario. This report compares the as-built conditions to the requirements of the Barrier-Free Design Section 3.8 and Compliance Alternatives Section 11.5 of the 2012 Ontario Building Code.

The entire report must be considered in order to rely on the findings contained within. Sampling information in the report may put it out of context.

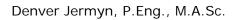
The report will not be released to anyone without your permission.

Thank you for giving us the opportunity to be of service. Should you have any questions regarding this report, please do not hesitate to call us.

Sincerely,

Signature

Daniel Frade, B.E.Sc, EIT





BARRIER-FREE COMPLIANCE REPORT

123 Inspection Road, Toronto, Ontario

Date of Inspection: July 12, 201X Final Report Issued: July 23, 201X

CoverPhoto

Prepared For: Ms. Client Name Client Address Toronto, Ontario M#M #M#







TABLE OF CONTENTS

1.0	SUMMARY	. 1
2.0	INTRODUCTION	. 2
3.0	EXTERIOR AND PARKING	. 5
4.0	ENTRANCES	. 8
5.0	BARRIER-FREE PATH OF TRAVEL (BFPT)	10
6.0	WASHROOMS	11
7.0	INTERIOR DOORS AND DOORWAYS	14
8.0	ACCESSIBILITY SIGNS	17
9.0	CONTROLS	19
10.0	TACTILE ATTENTION INDICATORS	20
11.0	CLOSING COMMENTS	21

APPENDIX A – PHOTOGRAPHS
STATEMENT OF QUALIFICATIONS



July 12, 201X

BARRIER-FREE COMPLIANCE REPORT

Property: 123 Inspection Road, Toronto, Ontario

1.0 SUMMARY

This is a barrier-free compliance report for the property at 123 Inspection Road, Toronto, Ontario.

This is a two-storey office structure. The main floor covers approximately 11,000 square feet and the second floor covers approximately 5,000 square feet. There is a partial basement below the two-storey portion, covering approximately 5,000 square feet.

The City reports that the building was constructed in approximately 1955.

This report has been prepared by Carson Dunlop Weldon & Associates Ltd. on behalf of our client.

Our client is a prospective redeveloper of the building and this report has been prepared to provide information concerning the building's barrier-free design compliance with Sections 3.8 and 11.5 of the Ontario Building Code (OBC) 2012.

The site inspection was carried out on July 12, 201X. Our inspection was limited to components that were readily visible and not obstructed by storage, finishes, furniture, etc.

The weather at the time of the inspection was sunny, with an approximate outdoor temperature of 30°C.

Compliance Overview

The barrier-free design of the building generally does not meet the current requirements of Sections 3.8 and 11.5 of the Ontario Building Code (OBC) 2012. There are many areas in which improvements would likely be required should the building undergo a change of occupancy and/or major renovation.

Improvements to the barrier-free design likely to be required include, but are not limited to:

- Modification of the exterior walkways
- Modifications to barrier-free ramps, guards, and handrails
- The provision of power door operators
- Improving the width of some corridors
- Improving the width of many doorways
- Replacement of the majority of the door handles
- The provision of a universal washroom
- The provision of accessibility signage
- Repositioning the controls within the building (for example light switches and thermostats)

2.0 INTRODUCTION

2.1 Inspection Authorization and Scope

As per the request of Ms. Client Name and in accordance with our Proposal dated May 3, 201X, a visual inspection was performed to verify the property's barrier-free compliance with respect to OBC 2012.

The following items were reviewed:

- Access to parking areas
- Exterior walkways
- Barrier-free entrances
- Barrier-free path of travel
- Ramps
- Doors and doorways
- Tactile attention indicators
- Signage
- Controls
- Barrier-free washrooms

This report is intended for the exclusive use of our client. Use of the information contained within the report by any other party is not intended and, therefore, we accept no responsibility for such use.

The inspection included a visual review of the building exterior and a sampling of the interior spaces. Several rooms within the building were locked at the time of the inspection and, as such, no comment can be offered on these areas.

Only the items specifically addressed in this report were examined. No comment is offered on building code compliance outside of Sections 3.8 and 11.5 of OBC 2012.

2.2 Building Description

This is a two-storey office structure. The main floor covers approximately 11,000 square feet and the second floor covers approximately 5,000 square feet. There is a partial basement below the two-storey portion, covering approximately 5,000 square feet.

Currently, the building falls under the Group D occupancy classification of the Ontario Building Code, business and personal services. For the purpose of this report, the front of the building is considered to be facing west.

2.3 Methodology

The assessment relies on interpretation of Section 3.8, Barrier-Free Design of the Ontario Building Code (OBC) 2012 and interpretation of any amendments and updates that have been published to date. Therefore, the report should be considered current, up to the date of the inspection.

The assessment also relies on interpretation of Section 11.5, Compliance Alternatives of the Ontario Building Code (OBC) 2012, where applicable. Some barrier-free design requirement alternatives are outlined in Section 11.5 that take the place of requirements outlined in Section 3.8, depending on the occupancy type of the building.

Section 3.8 defines barrier-free design requirements for newly constructed buildings. Section 11.5 provides a set of alternative requirements for buildings that are being renovated. The compliance alternatives outlined in Section 11.5 are typically less stringent than those required for newly constructed buildings.

OBC requirements are not retroactive. As such, the items identified in this report are permitted to remain in their existing condition. OBC requirements; however, are applied to all newly constructed buildings, buildings that undergo a change of use, or buildings that are extensively renovated. Should the building undergo a change of use or major renovation, some or all of the items addressed in this report will likely be required to meet the most up to date OBC barrier-free requirements.

The OBC reference number and description are provided for each item found to be non-compliant. Comments on the non-compliant items are also provided, where applicable.

The following abbreviations have been used throughout the report:

AFF – Above finished floor

BFPT - Barrier-free path of travel

mm - Millimeters

OBC - Ontario Building Code

PDO - Power door operator

TAI - Tactile attention indicator

2.4 Limitations

The following items were not included in this assessment:

- Any OBC requirements other than those of Section 3.8, Barrier-Free Design, and Section 11.5, Compliance Alternatives
- Measurements of forces (to open doors, operate controls, etc.)
- Load testing (of handrails, grab bars, change tables, etc.)
- Measurements of illumination levels

Section 3.8 includes some force, load, and illumination level requirements. If the building is undergoing a change of use or major renovation, further review of the above items would be required during the design and/or renovation of the building.

2.5 Documents Reviewed

As part of the barrier-free compliance assessment, a request was made to review available building plans, maintenance records, and previous reports. The following was available for our review:

- A## Site Plan by Architect, dated November 2, 201X
- A## Ground Floor Plan by Architect, dated November 2, 201X
- A## Second Floor Plan by Architect, dated November 2, 201X
- A## Basement Floor Plan by Architect, dated November 2, 201X

The plans were reviewed for general information only. The plans were not reviewed to ascertain fidelity of construction, verify building code compliance, or for the purposes of design analysis.

3.0 EXTERIOR AND PARKING

3.1 Description

The building is located on the east side of Inspection Road. There is a city-poured concrete sidewalk along the west side of the property, as well as a paver walkway. There is a poured-concrete walkway along the north side of the building. There are asphalt-paved parking areas at the northeast and south of the building.

There are ramps at the northwest and southwest entrance doors.

3.2 Areas of Non-Compliance

Access to Parking Areas

OBC Reference	Code Requirement	Observations	Comments
3.8.2.2(1) 3.8.2.2(1)(a)	A barrier-free path of travel shall be provided from the entrance described in Article 3.8.1.2 to: an exterior parking area, where exterior parking is provided.	The walkway at the north side of the building, providing access from the northeast parking area to the front entrances, does not conform to the requirements of a BFPT.	Refer to 3.8.3.2(1) below.

Exterior Walks

OBC Reference	Code Requirement	Observations	Comments
3.8.3.2(1)	Except as provided in Sentence (2), exterior walks that form part of a barrier-free path of travel shall:		
3.8.3.2(1)(c)	except as required in Sentence 3.8.1.3(4), have an uninterrupted width of not less than 1100 mm and a gradient not exceeding 1 in 20.	The walkway at the north side of the building has a width of 1070 mm	Not in compliance.

OBC Reference	Code Requirement	Observations	Comments
3.8.3.2(1)(h)	have a tactile attention indicator conforming to Article 3.8.3.18 that is located to identify an entry into a vehicular route or area where no curbs or any other element separate the vehicular route or area from a pedestrian route.	There are no tactile attention indicators where the exterior walkways intersect the parking areas.	Not in compliance.

Ramps

OBC Reference	Code Requirement	Observations	Comments	
3.8.3.4(1)	Ramps located in a barrier-free path of travel shall:			
	have a level area of at least 1670 mm by 1670 mm at the top and bottom of a ramp.	The ramp at the northwest of the building has a sloped surface at its top.	Not in compliance.	
3.8.3.4(1)(c)		The ramp at the southwest of the building has a level area less than 1670 by 1670 mm.		
3.8.3.4(1)(d)	have a level area at least 1670 mm long and at least the same width as the ramp, (i) at intervals of not more than 9 m along its length, and (ii) where there is a change of 90° or more in the direction of the ramp.	The ramp at the northwest has a sloped surface at its top where there is a 90° turn. The ramp at the southwest has a curved, sloped surface at a 180° turn.	Not in compliance.	
3.8.3.4(1)(e)	except as provided in Sentence (2), be equipped with handrails on both sides.	The ramp at the northwest has a handrail on only one side.	Not in compliance.	

OBC Reference	Code Requirement	Observations	Comments
3.8.3.4(1)(f)	except as provided in Sentence (2), have a wall or a guard on both sides and where a guard is provided the guard shall, (i) be not less than 1070 mm measured vertically to the top of the guard from the ramp surface.	The guards at both ramps are not of sufficient height.	Not in compliance.
3.8.3.4(1)(g)	be provided (i) with a curb at least 50 mm high on any side of the ramp where no solid enclosure or solid guard is provided, and (ii) with railings or other barriers that extend to within 50 mm of the finished ramp surface or have a curb not less than 50 mm high.	The curb at the northwest ramp is not at least 50 mm high along its entire length. There are no curbs at the southwest ramp and the guard does not extend to within 50 mm of the ramp surface.	Not in compliance.
3.8.3.4(1)(e) 3.8.3.4(1)(e) (iv)	except as provided in Sentence (2), be equipped with handrails on both sides that shall: extend horizontally not less than 300 mm beyond the top and bottom of the ramp.	The handrails at both ramps do not extend beyond the top and bottom of the ramps.	Not in compliance.

4.0 ENTRANCES

4.1 Description

Article 3.8.1.2 indicates that for a building with one to three pedestrian entrances, one entrance is required to be barrier-free. There appear to be three pedestrian entrances to the building at the northwest, southwest, and east. Two of these entrances, at the northwest and southwest, appear to be barrier-free. As such, the third entrance, at the east, would not be required to be barrier-free and was not closely reviewed.

The main entrances to the building are located at the northwest and southwest and face west onto Inspection Road. The entrance at the southwest includes a vestibule with doors in series, as well as doors that are not aligned.

The northwest entrance is comprised of an aluminum-framed, glazed single door. The southwest entrance is comprised of an aluminum-framed, glazed double door.

The doors are not equipped with power door operators.

OBC Reference	Code Requirement	Observations	Comments
3.8.3.3(4)	Except as permitted by Sentence (12), every door that provides a barrier-free path of travel through a barrier-free entrance required by Article 3.8.1.2 shall be equipped with a power door operator if the entrance serves a building containing a Group A, Group B, Division 2 or 3, Group C, Group D or Group E occupancy.	The northwest and southwest entrance doors are not equipped with power door operators.	Not in compliance.

OBC Reference	Code Requirement	Observations	Comments
3.8.3.3(5)	Except as permitted by Sentence (12), where a barrier-free entrance required by Article 3.8.1.2 incorporates a vestibule, a door leading from the vestibule into the floor area shall be equipped with a power door operator in a building containing a Group A, Group B, Division 2 or 3, Group C, Group D or Group E occupancy.	The southwest entrance incorporates a vestibule. The doors from the vestibule to the floor area are not equipped with power door operators.	Not in compliance.
3.8.3.3(11) 3.8.3.3(11)(b)	Vestibules located in a barrier-free path of travel: shall provide (i) where the doors into the vestibule are in series, a distance between the doors of at least 1500 mm plus the width of any door that swings into the space in the path of travel from one door to another.	The distance between the exterior and interior vestibule doors, when the interior door is in the open position, is 1110 mm.	The compliance alternative in Section 11.5 states a minimum distance of 1200 mm is permissible. Not in compliance.

5.0 BARRIER-FREE PATH OF TRAVEL (BFPT)

5.1 Description

The barrier-free path of travel is the route within and around a building that provides access to the building's amenities for persons with disabilities. The areas within a building that are required to have a BFPT are outlined in Article 3.8.2.1. A barrier-free path of travel is distinct from a normally occupied floor area. The normally occupied floor area refers to all areas of the building that are typically occupied and excludes, for example, service rooms, attic or roof spaces, crawl spaces, etc.

The entrance storey of the building is required to contain a barrier-free path of travel as per 3.8.2.1(1)(a). The basement and second floors of the subject building are not required to contain a barrier-free path of travel as the building is fewer than three-storeys in height, as per 3.8.2.1(2)(b).

OBC Reference	Code Requirement	Observations	Comments
3.8.1.3(1)	Except as required in Sentence (4) and except as permitted in Subsection 3.8.3, every barrier-free path of travel shall provide an unobstructed width of at least 1100 mm for the passage of wheelchairs.	The secondary corridors at the east were measured at widths of 810 and 1000 mm. Also, there are steel columns which obstruct the south-most corridor.	Not in compliance. The 1000 mm hallways; however, would be permitted to remain as per the compliance alternatives which state a clear width of 920 mm is permissible.
3.8.1.3(2)(a)	Interior and exterior walking surfaces that are within a barrier-free path of travel shall have no opening that will permit the passage of a sphere more than 13 mm in diameter.	There are floor drains in the shipping area and in the corridor to the north of the shipping area that have openings measured to be 15 mm.	Not in compliance.

6.0 WASHROOMS

6.1 Description

There is a men's washroom, a three-piece washroom, and two two-piece washrooms on the main floor. There are men's and women's washrooms on the second floor and a two-piece washroom in the basement. There are two showers in the basement, one in the main-floor three-piece washroom, four in the men's second-floor washroom, and one in the women's second-floor washroom.

6.2 Areas of Non-Compliance

Washrooms Required to be Barrier-Free

OBC Reference	Code Requirement	Observations	Comments
3.8.2.3(2)	The number of universal washrooms conforming to Article 3.8.3.12 provided in a building shall conform to Table 3.8.2.3.A.	There are no universal washrooms in the building. One universal washroom is required as per Table 3.8.2.3.A.	Not in compliance. Universal washrooms are required to have an open space of at least 1700 mm to permit a wheelchair to turn. The current floor spaces within the main floor washrooms are insufficient to meet this requirement. Extensive renovations to these washrooms would be required to facilitate the construction of a universal washroom.

OBC Reference	Code Requirement	Observations	Comments
3.8.2.3(3) 3.8.2.3(3)(a) 3.8.2.3(3)(b)	Where a washroom is provided in a storey that is required by Article 3.8.2.1 to have a barrier-free path of travel: the washroom shall conform to Articles 3.8.3.8 to 3.8.3.11. the number of barrier-free water closet stalls provided in the washroom shall conform to Table 3.8.2.3.B.	The washrooms on the main floor of the building (on the BFPT) do not conform to all requirements of Articles 3.8.3.8 to 3.8.3.11 in terms of, but not limited to, floor area, stall door configurations, water closet configurations and grab bars. The washrooms on the main floor are not equipped with any barrier-free water closet stalls.	Not in compliance. Articles 3.8.3.8 to 3.8.3.11 provide requirements for barrier-free water closet stalls, water closets, urinals, and lavatories. If a universal washroom was provided on the main floor, the remaining washrooms would not be required to be barrier-free as they would be within 45 m of the universal washroom as per the code requirements.
3.8.2.3(6) 3.8.2.3(6)(a) 3.8.2.3(6)(b)	Where a washroom is provided in a storey that is not required by Article 3.8.2.1 to have a barrier-free path of travel, the washroom shall: conform to Article 3.8.3.9 and Sentences 3.8.3.10(5) and 3.8.3.11(5). be provided with at least one ambulatory water closet stall conforming to Sentence 3.8.3.8(10).	The washrooms in the basement and on the second floor do not conform to all requirements of 3.8.3.9, 3.8.3.10(5), and 3.8.3.11(5) in terms of, but not limited to, floor area, stall door configurations, grab bars, and water closet configurations. The washrooms in the basement and on the second floor do not have any ambulatory water closet stalls.	Not in compliance. Articles 3.8.3.9, 3.8.3.10(5), and 3.8.3.11(5) provide requirements for water closets, urinals, and lavatories.

Urinals

OBC Reference	Code Requirement	Observations	Comments
3.8.3.10(2) 3.8.3.10(2)(b)	A urinal described in Sentence (1) shall have: a vertically mounted grab bar installed on each side of the urinal.	None of the urinals in the building are equipped with grab bars.	Not in compliance. Sentence (1) describes the requirements of a barrier-free urinal.

Showers

OBC Reference	Code Requirement	Observations	Comments
3.8.3.13(1)	Except within a suite of residential occupancy, if showers are provided in a building, the number of barrier-free showers shall conform to Table 3.8.3.13.	None of the showers within the building are barrier-free accessible. Deficiencies include, but are not limited to, lack of proper floor space, insufficient clearances, lack of grab bars, lack of seats, and improper controls.	Not in compliance. Table 3.8.3.13 states that if one shower is provided in a group, it does not need to be barrier-free accessible. If two to seven showers are provided in a group, at least one needs to be barrier-free accessible. Therefore, at least one shower in the basement and one shower in the men's second-floor washroom is required to be barrier-free accessible.

7.0 INTERIOR DOORS AND DOORWAYS

7.1 Description

There are doors separating various interior corridors and office areas. The majority of the interior doors are metal and wood units. Some units are equipped with glazed vision panels.

OBC Reference	Code Requirement	Observations	Comments
	Every doorway that is located in a barrier-free path of travel shall have a clear width of not less than 860 mm when the door is in the open position.	The compliance alternatives in Section 11.5 state that doorways no less than 810 mm are permissible.	
3.8.3.3 (1) 3.8.3.3(19) 3.8.3.3(19)(a)	A normally occupied floor area that is not required by Article 3.8.2.1 to have a barrier-free path of travel shall comply with the following requirements: all doorways in public corridors in the normally occupied floor area shall comply with Sentence (1) above.	Many of the doorways on the main floor level and at the corridors in the basement and second floor level were measured to be narrower than 810 mm. For example, widths of 690, 700, 740, 790, and 800 mm where measured.	Not in compliance.

OBC Reference	Code Requirement	Observations	Comments
	Door opening devices that are the only means of operation shall:		
	be designed to be operable using a closed fist.		
3.8.3.3(3) 3.8.3.3(3)(a) 3.8.3.3(19) 3.8.3.3(19)(b)	A normally occupied floor area that is not required by Article 3.8.2.1 to have a barrier-free path of travel shall comply with the following requirements:	Many of the doors throughout the building are equipped with door knobs that are not operable with a closed fist.	Not in compliance.
	door opening devices that are the only means of operation on doors in the normally occupied floor area shall comply with Sentence (3) above.		
			Not in compliance.
3.8.3.3(6) 3.8.3.3(6)(a)	A door shall be equipped with a power door operator where the door serves: a washroom for public use required to be barrier-free.	None of the washroom doors in the building are equipped with power door operators.	Should a washroom on the main floor level be renovated into a universal washroom, it would be required to include a power door operator. Other washrooms would not be required to include power door operators.

OBC Reference	Code Requirement	Observations	Comments
3.8.3.3(14) 3.8.3.3(14)(a) 3.8.3.3(19) 3.8.3.3(19)(c)	Where a vision panel is provided in a door in a barrier-free path of travel, such panel shall be at least 75 mm in width and be located so that: the bottom of the panel is not more than 900 mm above the finished floor. A normally occupied floor area that is not required by Article 3.8.2.1 to have a barrier-free path of travel shall comply with the following requirements: where a vision panel is provided in a door in the normally occupied floor area, the panel shall comply with Sentence (14) above.	Vision panels at a door at the southwest of the main floor and at two doors at the southeast of the basement have vision panels whose bottom edges are greater than 900 mm above the finished floor. For example, the vision panel at the door at the southwest of the main floor was measured at 1050 mm above the finished floor.	Not in compliance.

8.0 ACCESSIBILITY SIGNS

8.1 Description

No accessibility signage was noted on the property.

OBC Reference	Code Requirement	Observations	Comments
3.8.3.1(1) 3.8.3.1(1)(a) 3.8.3.1(1)(b)	Where a building is required to have a barrier-free entrance, signs incorporating the International Symbol of Access shall be installed to indicate the location of: that entrance. ramps located in a required barrier-free path of travel serving that entrance.	No accessibility signage was noted at these locations.	Not in compliance.
3.8.3.1(2)	Where a washroom, elevator, telephone or parking area is required to accommodate persons with disabilities, it shall be identified by a sign consisting of the International Symbol of Access and such other graphic, tactile or written directions as are needed to indicate clearly the type of facility available.	No accessibility signage was noted at these locations.	Not in compliance.

OBC Reference	Code Requirement	Observations	Comments
3.8.3.1(3)	Where a washroom is not designed to accommodate persons with disabilities in a storey that is required by Article 3.8.2.1 to have a barrier-free path of travel, signs shall be provided to indicate the location of a washroom required to be barrier-free.	No accessibility signage was noted.	Not in compliance.
3.8.3.1(4)	Signs incorporating the International Symbol of Access shall be installed where necessary to indicate the location of a barrier-free means of egress.	No accessibility signage was noted.	Not in compliance.

9.0 CONTROLS

9.1 Description

The building is equipped with various controls for fire protection systems, thermostats, and light switches.

OBC Reference	Code Requirement	Observations	Comments
3.8.1.5(1) 3.8.1.5(1)(c)	Except as required by Sentences 3.5.2.2(1) and 3.8.3.5(1) for elevators and Sentence 3.8.3.3(17) for power door operator controls, controls for the operation of building services or safety devices, including electrical switches, thermostats and intercom switches, intended to be operated by the occupant and located in a barrier-free path of travel shall:	All light switches and thermostats sampled within the building were measured to be more than the allowable heights.	Not in compliance.
	be mounted (i) 1200 mm above the finished floor, in the case of a thermostat or a manual pull station, and (ii) not less than 900 mm and not more than 1100 mm above the finished floor, in the case of all other controls.		

10.0 TACTILE ATTENTION INDICATORS

10.1 Description

Tactile attention indicators (TAI) are standardized walking surfaces that convey information to persons who pass over them via texture. TAIs call attention to potential hazards such as the start of a staircase or the edge of a platform.

The building is not equipped with any tactile attention indicators.

OBC Reference	Code Requirement	Observations	Comments
3.4.6.2(2) 3.4.6.2(2)(a)	A tactile attention indicator conforming to Article 3.8.3.18 shall be installed: at the top of the stairs, starting one tread depth back from the edge of the top stair.	No tactile attention indicators have been installed at the tops of the staircases.	Not in compliance.

11.0 CLOSING COMMENTS

This report provides you with an overview of the barrier-free design compliance of the subject property. We trust this information is of value. Should you have any questions, please do not hesitate to contact us.

Appendix A contains photographs documenting conditions noted in our report.

A statement of qualifications is also included for your reference.

Sincerely,

Signature

Signature

Denver Jermyn, P.Eng., M.A.Sc.

Daniel Frade, B.E.Sc, EIT

APPENDIX A

PHOTOGRAPHS

123 Inspection Road Toronto, Ontario



Photo 1. Walkway at the north side of the building forming part of the barrier-free path of travel. Note the walkway is too narrow.

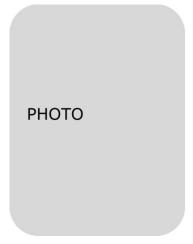


Photo 2. Missing tactile attention indicator at the intersection between the previously depicted walkway and the adjacent parking area.



Photo 3. Overview of the ramp at the northwest of the building. Note that only one handrail has been provided and there is no level surface at the top of the ramp where there is a 90 degree turn.



Photo 4. Curved and sloped surface at a 180 degree turn in the southwest ramp. There should be a level surface at this location.



Photo 5. Level area at the base of the southwest ramp. This level area is too small by current requirements. Note that the handrails do not extend beyond the end of the ramp, as is required.



Photo 6. Overview of the main entrance to the building. This is also the main barrier-free entrance. Note that no power door operator has been provided.

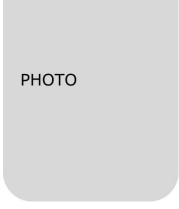


Photo 7. Vestibule at the front entrance door. Note that the dimension between the open interior door and the exterior door is insufficient (1110 mm compared to the required 1500 mm).

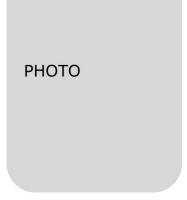


Photo 8. Example of a steel column that obstructs a corridor that is part of the barrier-free path of travel.

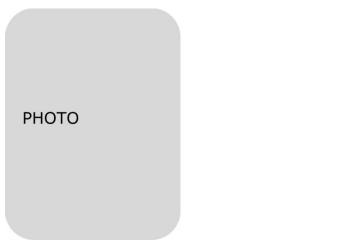


Photo 9. Example of a corridor in the barrier-free path of travel that is too narrow (810 mm compared to the required 1100 mm).

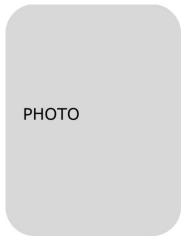


Photo 10. Example of openings in a drain in the barrier-free path of travel that are too large (15 mm compared to the maximum of 13 mm).

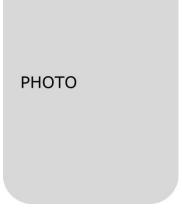


Photo 11. Overview of a typical water closet and water closet stall. The stalls do not have the proper floor area to be barrier-free. The water closet, toilet paper dispenser and stall door also do not meet current barrier-free requirements.



Photo 12. Overview of a typical lavatory. The lavatories do not have clearances beneath them, as is required.

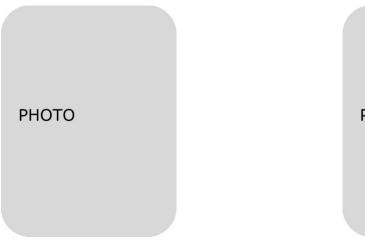


Photo 13. Overview of the basement washroom. Note that the lavatory has proper clearance beneath it; however, the exposed piping is not insulated.

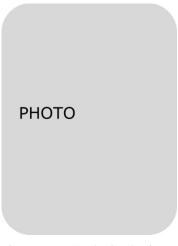


Photo 14. Typical urinals. Note there are no grab bars.



Photo 15. Example of typical shower stalls. Note the stalls do not have proper floor areas to be barrier-free and have thresholds that are too high.

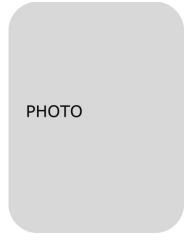


Photo 16. Typical doorway that is too narrow.

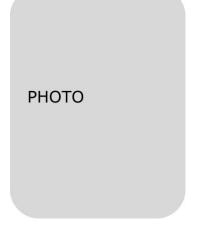


Photo 17. Typical vision panel in a door that is too high above the finished floor.



Photo 18. Example of a missing tactile attention indicator at the top of a staircase.

DENVER JERMYN, P.Eng., M.A.Sc. Carson Dunlop Weldon & Associates Ltd.

- > Graduated in 2008 from University of Guelph with a Bachelor of Engineering, Biological.
- ➤ Graduated in 2014 from Ryerson University with a Master of Applied Science in Building Science. Elective courses included building science theory, building envelope condition assessment, and lighting design.
- Designated by the Association of Professional Engineers of Ontario as a Professional Engineer in 2016.
- Completed the Commercial Building Inspection Course by Carson Dunlop Weldon & Associates Ltd. in 2014.
- Joined Principle Water Resources Inc. in 2010 as an Assistant Project Manager. The position included project management and contract administration, preparation of bid and contract documents, mechanical design and specification for rainwater harvesting and irrigation systems, and condition assessments of institutional, commercial, and industrial irrigation and rainwater harvesting systems.
- ➤ Joined Carson Dunlop Weldon & Associates Ltd. in 2014 as a Building Consultant. Primary responsibilities comprise physical condition assessments for commercial, industrial and residential properties and preparation of inspection reports describing conditions of major building components, including structure, building envelope, plumbing, electrical and mechanical systems, as well as hard and soft landscaping.

PUBLICATIONS INCLUDE

- ➤ "A Process for Developing Deep Energy Retrofit Strategies for Single Family Housing Typologies: Three Toronto Case Studies" Energy and Buildings, Volume 116 March 2016
- ➤ "Structural and Durability Analysis of a novel re-roofing concept" Engineering Structures and Technologies, Volume 9 December 2017



Qualification Page 1

DANIEL FRADE, EIT, B.E.Sc Carson Dunlop Weldon & Associates Ltd.

- ➤ Graduated in 2015 from The University of Western Ontario with a Bachelor of Engineering Science degree, specializing in structural engineering.
- > Enrolled in the Engineering Intern Training (EIT) Program with Professional Engineers of Ontario.
- ➤ Joined Carson Dunlop Weldon & Associates Ltd. in 2015 as a Building Consultant. Primary responsibilities comprise physical condition assessments for commercial, industrial and residential properties and preparation of inspection reports describing conditions of major building components, including structure, building envelope, plumbing, electrical and mechanical systems.

CONTINUING EDUCATION COURSES INCLUDE

- Ministry of Municipal Affairs and Housing, General Legal/Process 2012
- Ministry of Municipal Affairs and Housing, Complex Buildings 2012
- Completed the Home Inspection Training Program by Carson Dunlop & Associates Limited in 2016

