

SUBMISSION STANDARDS

PREPARING YOUR ELECTRONIC SUBMISSION

These Standards are applicable to all applications made to the Building Standards Department. All files uploaded must meet our Submission Standards. Standards allow for easy identification of drawings by naming convention, vector file types in order to facilitate the most efficient review, colour coding of comments for visual identification of departments and so on.

Some application types are exempt from certain Submission Standards. Refer to the Application Specific Quick Reference Guides available on the ePLAN Guides and Tutorials page for more information.

SUMMARY OF STANDARDS

Below is a high level summary of the Submission Standards. For more information on each requirement, refer to the detailed Sections on the following pages.

BLANK SPACE

The top right corner of all drawings and documents must be reserved for the City of Markham's electronic approval stamps. Please leave the top right corner completely blank on all drawings (with exception of the border) and supporting documents.

	Blank Space Dimensions (measured from edge of sheet)
Drawings	All sheets: 3.5 inches wide x 5.5 inches high
Supporting Documents / Shop Drawings	Front Page only: 3.5 inches wide by 2.5 inches high
Forms	Not applicable
Approval Documents	Not applicable

FILE FORMAT

File Type	Required Format
Drawings	Vector-based PDF Each drawing uploaded as a separate PDF Layers must be flattened Greyscale except for fire separations
Supporting Documents / Shop Drawings	Vector or Raster based PDF
Forms	Vector or Raster based PDF

All files must be uploaded in an orientation that allows them to be reviewed without having to be rotated. All drawings within each discipline must be on the same size sheet and in the same orientation.

FILE NAMES

File names must be 50 characters or less. Drawing files must be named so that they will sort alphabetically in the order that they are meant to be read within the drawing package. Drawing files must contain the sheet number and title.



BLANK SPACE

ALL DOCUMENT AND DRAWING FILES

The top right corner of all drawings and documents must be reserved for the City of Markham's electronic approval stamps. Please leave the top right corner completely blank on all drawings (with exception of the border) and supporting documents.

The approval stamps are not transparent and may be applied over the base drawing. It is recommended that a cover page be added to supporting documents to ensure the stamp box does not obstruct required information. Cover pages must include the project address and a description or title of the supporting document.

	Blank Space Dimensions (measured from edge of sheet)
Drawings	All sheets: 3.5 inches wide x 5.5 inches tall
Supporting Documents / Shop Drawings	Front Page only: 3.5 inches wide by 2.5 inches tall

Below is an example of the required stamp box location for drawings:

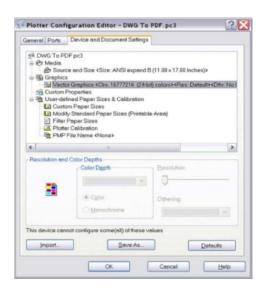
3" Wide by 5" Tall Blank Space (0.5" from papers edge)



FILE FORMAT

DRAWING FILES

- 1. Each drawing sheet or page shall be uploaded as a separate file.
- 2. Only Vector PDF files will be accepted for drawings. CAD software is commonly used to create drawing files. As an example, drawings created in AutoCAD are converted to Vector PDF by using the Autodesk Vector Graphic Converter "DWG to PDF.pc3 plotter driver."
- 3. All drawings must be flattened into a single layer. We do not need to see layers that clutter the drawings. Layers such as floor finishes that are cross hatched, is an example of such a layer.
- 4. Fire separation drawings are required to be in colour. All other PDFs are required to be grayscale. No colour should be on the greyscale drawings with the exception of borders, templates or stamps.



SUPPORTING DOCUMENT FILES

- 1. Each document shall be uploaded as a separate file. Each document file can contain multiple pages.
- 2. Submit searchable PDF files for calculations, reports, shop drawings and other supporting documentation (non-drawing files).
- 3. All other supporting documents must be uploaded as a PDF file (vector or raster based).

FORMS & APPROVAL DOCUMENTS

- 1. Each form or approval document shall be uploaded as a separate file.
- 2. PDF is preferred, but forms may be in the following formats: TIF, TIFF, JPG, PNG, IMG, or BMP.
- **3.** Forms and approval documents must be uploaded in an orientation that allows them to be reviewed without having to be rotated.



FILE NAMING STANDARDS

GENERAL

File names for both drawings and documents shall remain the same for all submittals. <u>DO NOT</u> VERSION OR RENAME FILES WHEN UPLOADING RESUBMITTED FILES. Adding a revision number or any other change to the file name will delay the acceptance of your resubmission.

File names must be 50 characters or less. It is recommended that you do <u>not</u> use spaces or underscores in file names. Spaces can be replaced by hyphens.

DRAWINGS

Files are sorted alphabetically when uploaded to ePLAN. The files in the *Drawings* folder must display in the same order as they would appear if they were printed and bound in a drawing package for a paper submission. Drawing file names must contain the sheet number and title of the drawing.

The following table can be used as an example when creating file names for your submission.

Discipline	File Name
Architectural	A201-Ground-Floor-Level-2-Key-Plans.pdf
Electrical	E202-P-2-Parking-Plan.pdf
Mechanical	M327-4TH-Floor-Plan.pdf
Structural	S501-Beam-Schedule.pdf
Shoring	SH01-Excavation-Shoring-Plans-Notes-Details.pdf
Site Servicing	SS-1-Site-Servicing-And-Grading.pdf

DOCUMENTS

File names for documents submitted through ePLAN should include the name of the document.



UPLOAD LOCATION

The Submission Standards in this section apply to all files uploaded to ePLAN. There are two categories of files: drawings and documents. Documents include forms, supporting documents, and approval documents.

The following table summarizes the file categories, examples of each and the folder they must be uploaded to in ePLAN:

File Type	Examples	Upload Folder
Drawings Design drawings that will be used for the construction of the building. All submitted drawings must be on standardized sized sheets, drawn to scale	 Site plan Key plan Architectural Structural Mechanical Plumbing Electrical 	Drawings
Forms Application forms required by the City of Markham.	 Applicant Authorization Applicable Law Checklist Schedule 1 Commitment to General Review Plumbing Data Form Energy Efficiency Design Summary Building and Land Use Declaration 	Documents
Supporting Documents Supporting document files include other files that are required as part of the application submission, but are not drawing files. Generally, these consist of shop drawings, calculations and reports.	 Roof truss shop drawings Floor joist shop drawings Soils reports Specifications Heat loss / heat gain calculations Energy efficiency calculations 	Documents
Approval Document Document issued by an external agency and required by Applicable Law identified on the Applicable Law checklist	 Site plan approval memorandum Committee of Adjustment Final and Binding Decision TRCA Permit MTO Building and Land Use Permit 	Applicable Law

EXEMPTIONS FROM SUBMISSION STANDARDS

Where a permit applicant is unable to meet one or more of the Submission Standards criteria, an exemption may be requested on a project by project basis. Written approval must be obtained from the Manager, Plans Review or designate. This approval is required to be uploaded with the submitted drawings and documents.