RETAINING WALLS/SEAT WALLS

The following are guidelines and requirements to assist when installing a **retaining wall or seat wall**. This information is provided to identify minimal requirements in the County’s adopted Building Code and Zoning Ordinance. These guidelines are not all inclusive, but cover the most critical requirements involved in this type of project. Feel free to contact our department if you have further questions.

**Requirements to submit:** (must be submitted in person) approximate review time – 8-15 business days

1. Application form for accessory structures - Type I (All applications are required to have the owner's signature or a notarized owner authorization form signed by the owner of the property to submit for permit - we cannot accept the submittal without either one of those documents)
2. Non-refundable application fee
3. Plat of Survey
4. Construction detail/brochure on landscape blocks (sample drawings below)
5. Trust Disclosure form for properties in a trust

1. The **Type I application** form shall be filled out completely. The owner’s name, address and phone number, site address if different, cost of proposed work, whether the property is on water/sewer or well/septic, contractor’s name and registration number (all contractors doing work in the unincorporated areas of DuPage County must be registered with our department prior to permit issuance), signature of owner. A notarized **Owner Authorization** form is required if the owner of the property did not sign the application form.
2. A non-refundable application fee will be required – this portion of the fee is credited toward the final permit fee (reference the **Schedule of Fees** for specifics), a Drainage Review fee and a Health fee if the property is on well and/or septic. If payment is by check a separate check will be necessary to pay the Health review fee portion. We accept exact cash, checks or Master Card and Visa.
3. Provide 6 copies of the scalable Plat of Survey with the retaining wall drawn to scale in the exact proposed location with dimensions and dimensions to the nearest lot lines. The survey must show all existing structures with the Illinois Licensed Land Surveyor’s seal and signature visible.
According to the Building Code the scales accepted are 1”=10’, 1”=20’, 1”=30’, 1”=40’ or 1”=50’. Reduced/enlarged copies WILL NOT be accepted.

4. Provide 2 copies of construction detail on the wall or brochure if using the landscape blocks.

5. For any property that is in a trust (bank or trust company) will need to have the Trust Disclosure form completed by the trust company stating the beneficiary of the trust. For properties in a family trust we need some paperwork showing the beneficiary for signing the application.

Requirements at permit issuance:

6. Utility Easement form
7. Drainage Easement Agreement form
8. Entrance permit
9. Fees
10. Performance Bond
11. Contractor Registration

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

6. For retaining walls located in any part of a drainage/utility easement a notarized affidavit will be required. This gives the applicant the responsibility to contact the utility companies that are in that easement so they are aware of a structure being installed in that easement.

7. Also for retaining walls located in any part of a drainage and utility easement a Drainage Easement Agreement must be filled out and any individual on the deed of the property will need their signature notarized.

8. Prior to permit issuance an Entrance Permit/bond receipt from whoever maintains the roadway (Township Highway Commissioner, Du Page County Department of Transportation, Illinois Department of Transportation or municipality). If a bond is required it is to protect their right-of-way and culvert area.

9. Permit fees are due at the time of issuance. We accept exact cash, check or Master Card and Visa. (The application fee will be credited toward the final permit fee)

10. The Performance Bond insures code compliance and is included in your permit fee. This portion of the fee is fully refunded once the final inspection has been approved.

11. All contractors working on the project are required to be registered with DuPage County Building Division and must be current when the permit is issued.


Retaining Walls in all yards shall be setback at least 1 foot from all property lines.

Non Residential Zoned: Please contact the Zoning Section at 630-407-6700

Drainage Requirements:

Retaining walls twenty-four (24) inches or more in height will require the certification of an Illinois Registered Structural Engineer or Architect. Manufacturer’s specification sheets will need to be provided on those wall sections that are pre-made (e.g. inter-locking wall system). The required certification may be required for as-built approval. Disclaimer: If there are any special management areas (including any of the following: floodplain, wetland and wetland buffer) on the property additional permit requirements may be needed. See Sec.8-128.2 of the County’s Building Code for Minimum Plan Requirements.

Pursuant to 8-128.2.E of the Building Code, any development in the floodplain must obtain an Elevation Certificate. Where a development, structure or property has substantial damage, has or will have substantial
improvement or is the subject of repetitive loss regulations, the development, structure or property shall comply with the requirements of the Building Code and the DuPage County Countywide Stormwater And Flood Plain Ordinance, which includes the need to obtain an Elevation Certificate. (Ord. No. DC-O-0030-15, 8-11-2015)

- The FEMA 2015 Elevation Certificate is available from FEMA (https://www.fema.gov/media-library/assets/documents/160). It is a fillable PDF form.

**Minimum Building Plan Requirements:**
Top and bottom elevations of the proposed retaining wall, along with a cross-section detail for the proposed design. Walls twenty-four inches (24") or more in height require the certification of a registered Illinois architect or structural engineer. Manufacturer’s specification sheets are required for walls that are pre-engineered (e.g. pre-cast inter-locking wall system, etc.) Depending on the type of wall system, height, etc. the above certification may also be required, along with as-built drawings of the installation.

The following are sample drawings of various wall cross sections for retaining walls.
Sample drawing

Typical Cross Section
Brussels Dimensional Stone

Sample drawing

1. Brick same as House Brick
2. Note: New gate will be identical to existing one

CONCRETE PIER

12' x 15'

CONCRETE ADHESIVE BETWEEN LAYERS

Pavers

COMPACTED GRANULAR BASE

Max Height 30'

Soil

12"
Segmental Wall Typical Cross Sections

**BRUSSELS DIMENSIONAL STONE**

**DURA-HOLD**

**ESTATE WALL**

**TYPICAL RETAINING WALL CROSS SECTION**

**TYPICAL SEAT WALL CROSS SECTION**

**HOW TO SPLIT LARGE UNIT**

All joints must be adhered with Unlock Concrete Adhesive. Base preparation may vary according to soil and climate conditions.

Curved walls or steps can be constructed from a 48" outside radius when using all three sizes. A 38" radius can be constructed using only the small wall units or a 43" radius using both the small and medium wall units.
TYPICAL WALL CROSS SECTIONS

- Olde Quarry Coping Unit
- Unilock Adhesive
- Olde Quarry Standard Unit
- PVC Inserts
- Retained Soil
- Drainage Layer
- Filter Fabric
- Perforated Drain with Filter Sock
- Compacted Granular Base
- Native Soil

TYPICAL SEAT-WALL CROSS SECTIONS

- Olde Quarry Coping Unit
- Unilock Adhesive (between all units)
- Olde Quarry Wall Unit
- Grade
- Compacted Granular Base
- Foundation Soil

TYPICAL OUTSIDE RADIUS

Curved walls or steps can be constructed from a minimum 36" outside radius when using all three sizes. A 27.5" radius can be constructed using only the small wall units or a 32.5" radius using both the small and medium wall units.

TYPICAL PILLAR CROSS SECTIONS

- Lamp (Optional)
- Architectural Cap or Olde Quarry Corner Units
- Unilock Adhesive (TYP)
- Olde Quarry Corner Unit
- Grade
- Min. 2 courses below grade
- Precast or poured concrete slab
- Filter Cloth

Note: This pillar is constructed completely with Olde Quarry corner units.
**SIENA STONE®**

**GRAVITY WALL**

- **Stack Stone Coping Unit**
- **Stack Stone Standard Unit**
- **Grade**
- **Granular Backfill**
- **Retained Soil**
- **Perforated Drain with Filter Sock**
- **Native Soil**

**GRAVITY 'S00' WALL**

- **Sienna Stone Coping Unit**
- **Sienna Stone Standard Unit**
- **Grade**
- **Granular Backfill**
- **Perforated Drain with Filter Sock**
- **Native Soil**

**GRAVITY 'S00' / '925' WALL**

- **Sienna Stone Coping Unit**
- **Sienna 925 Unit**
- **Grade**
- **Filter Cloth**
- **Perforated Drain with Filter Sock**
- **Native Soil**

---

**TYPICAL CORNER**

**First Course**

- **Second Course**

---

**TYPICAL RADIUS**

- Minimum outside radius: 29"

- Minimum Inside radius: 21"

---

**HEIGHT COURSES**

<table>
<thead>
<tr>
<th>Height</th>
<th>Courses</th>
<th>Length of Wall Measured in Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>1</td>
<td>9 18 27 36 45 54</td>
</tr>
<tr>
<td>8&quot;</td>
<td>2</td>
<td>18 36 54 72 90 108</td>
</tr>
<tr>
<td>12&quot;</td>
<td>3</td>
<td>27 54 81 108 135 162</td>
</tr>
<tr>
<td>16&quot;</td>
<td>4</td>
<td>36 72 108 144 180 216</td>
</tr>
<tr>
<td>20&quot;</td>
<td>5</td>
<td>45 90 135 180 225 270</td>
</tr>
<tr>
<td>24&quot;</td>
<td>6</td>
<td>54 108 162 216 270 324</td>
</tr>
</tbody>
</table>

**Minimum Number Of Units Required**

**Notes**

For Coping calculation use only course #1.
Calculations are for Solid Wall Construction.
See your Unilock representative when calculating a Semi-Solid Wall.
Inspections: (a minimum of 24 hours advance notice required for inspection scheduling) Please contact the Building Division at 630-407-6700 to schedule an inspection. (Where no work has been started within 90 days after the issuance of a permit, or when more than 90 days lapses between required inspections, such permit shall be void. No work shall commence prior to issuance of permit).

Feel free to contact our office if you have any questions regarding the permit or inspection process at 630-407-6700. The office location is 421 N. County Farm Road, Wheaton, IL 60187. You can visit our website at www.dupageco.org/building.

CALL BEFORE YOU DIG – CONTACT JULIE, 1-800-892-0123 FOR UNDERGROUND UTILITY LOCATIONS