*Note this is not an exhaustive list, and is based on survey information available September 2019. There may be other buildings that also contain pre-stressed concrete members. There has also been new construction since this list was prepared. Note also that prestressed concrete may have been used in non-structural or secondary structural elements (cladding, etc) and this would not always be indicated on the structural drawings.

**Building:** Central Mall Area (CM)/ West Mall Centre (WMC)
**SFU Building ID:** 003/041
**Seismic Overview Report ID:** SOR-003-CM-2014

1.0 BUILDING DESCRIPTION, CONSTRUCTION PHASING AND DRAWINGS
## 2.0 KEY STRUCTURAL INFORMATION

<table>
<thead>
<tr>
<th>Phase #</th>
<th>Major Structural System</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHASE III</td>
<td>- PT Cast-in-place concrete and steel structure.</td>
</tr>
<tr>
<td>(WMC)</td>
<td>- <strong>Foundations</strong>: RC slab on grade; RC spread footings under columns and RC strip footings under walls.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Floor</strong>: RC PT flat slab supported on RC columns and walls.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Roof</strong>: RC PT flat slab supported on RC columns and walls; roof above stairs consists of concrete topping on steel deck supported on steel beams and RC walls.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Lateral load-resisting system</strong>: concrete slab and steel deck act as diaphragms that transfer lateral forces to concrete shear walls.</td>
</tr>
</tbody>
</table>
1.0 BUILDING DESCRIPTION, CONSTRUCTION PHASING AND DRAWINGS

2.0 KEY STRUCTURAL INFORMATION

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<tr>
<th>Phase #</th>
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</table>
| PHASE I  | - Cast-in-place concrete structure  
- Foundations: RC slab on grade; spread footing under columns and walls  
- Floor: RC slab supported on RC concrete pan joist or post- tensioned beams and RC columns and walls |
| PHASE II | - Concrete structure  
- Foundations: RC slab on grade; spread footing under columns and walls  
- Floor: RC slab supported on concrete joist or post-tensioned beams and RC columns and walls |
| PHASE III| - Concrete structure  
- Foundations: RC slab on grade; spread footing under columns and walls  
- Floor: RC slab supported on RC beam, Post-tension beams, concrete joist and RC columns and walls |
Building: Strand Hall (SH)
SFU Building ID: 011
Seismic Overview Report ID: SOR-011-SH-2014

1.0 DESCRIPTION, CONSTRUCTION PHASING AND DRAWINGS

2.0 KEY STRUCTURAL INFORMATION

<table>
<thead>
<tr>
<th>Phase #</th>
<th>Major Structural System</th>
</tr>
</thead>
</table>
| PHASE I  | - Cast-in-place concrete structure.  
|          | - Foundations: perimeter RC walls; pad and strip footings under concrete columns and walls; RC slab on grade.  
|          | - Suspended Slabs & Roof: 4 1/2" RC slab with PT concrete beams and girders.  
|          | - Lateral load-resisting: RC floor and roof slabs act as diaphragms; there is long perimeter and interior concrete shear walls below grade; walls around stairs and elevator shafts act as shear walls and transfer the lateral load to the foundation. |
1.0 BUILDING DESCRIPTION, CONSTRUCTION PHASING AND DRAWINGS

2.0 KEY STRUCTURAL INFORMATION

<table>
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</thead>
</table>
| PHASE I | - Reinforced Concrete structure with steel reinforcing and grouted PT strands.  
- Foundation: slab on grade; strip footing under concrete walls; concrete caisson support  
- Upper structure: cast-in-place concrete bearing walls in both outer and inner shafts; cast-in-place concrete room at the top.  
- Roof: concrete roof deck. |
Building: Saywell Hall (SWH)
SFU Building ID: 022
Seismic Overview Report ID: SOR-022-SWH-2014

1.0 BUILDING DESCRIPTION, CONSTRUCTION PHASING AND DRAWINGS

Second Floor: PT box beams

PHASE I (2008)
## 2.0 KEY STRUCTURAL INFORMATION

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| PHASE I | - Cast-in-place concrete structure.  
- Foundations: RC retaining walls and RC walls on strip footings; spread footing under concrete columns.  
- Main Floor: 125mm concrete slab on grade.  
- Second Floor: Framing consists of either a 203mm or 305mm deep hollow core supported by RC beams on columns or suspended slab flat slap supported by RC walls. Framing at the link bridge consists of a 225mm RC slab on PT box beams.  
- Roof: Framing consists of a 203mm deep hollow core supported by RC beams on columns. The roof of the lecture halls and courtyard consists of a steel deck on Douglas Fir Glulam beams supported by RC walls. Framing above the link bridge consists of wood joists on glulam columns.  
- Lateral load-resisting system: Main system consists of RC suspended slabs and hollow core that act as diaphragms that help to transfer lateral forces to concrete moment frames that consist of RC beams and columns. |