

# 81 ON SEVENTH

## **Building Materials Reuse**

*Transforming the way we renovate*

Please enjoy reading how we have salvaged some of the historical and architectural treasures of the Building.

**Douglas-fir** is the primary structural component of the building. The beams, columns and floor joists are nearly all made of Douglas-fir. The renovation of this building was done with sustainability in mind. The 3” X 14” Douglas-fir timbers on the west walls of the elevator shafts were removed during the construction of the elevator shafts and are samples of the structural floor joists used in the 1907 construction of this building. That year, nearly 66% of all Douglas-fir was harvested in Washington state and another 29% in Oregon. The lumber was likely harvested by the St. Paul & Tacoma Lumber Company.

Douglas-fir is the English common name for evergreen coniferous trees of the genus *Pseudotsuga* in the family Pinaceae. Douglas-firs are medium-size to extremely large evergreen trees 70–390 ft tall. Douglas-fir wood is used for structural applications that are required to withstand high loads. It is used extensively in the construction industry. Large-sized Douglas-fir, as used in beams, is inclined to split as it dries, like oak, but this does not reduce its strength.

Douglas-fir is one of the worlds most important and valuable timber trees. Traditionally, it was used in mast building due to its ability to resist bending loads without fracturing. This was based on using older native forest wood with a high number of growth rings per inch. This sort of wood is seldom available new but can be sourced from merchants dealing in recycled timber.

Although Douglas-fir is the primary structural component of the building and nearly all of it has been salvaged for reuse on the renovation project, other building materials have been retained and/or reused per the following.

### **Maple Flooring**

The new stairway landings have been constructed using maple flooring salvaged from the floor penetrations required for the new elevator and stairwell shafts.

### **Metal Stamped Ceilings**

The original stamped tin ceilings on first, second and third floors have been repaired by a local artisan and repainted.

### **Beams and Columns**

The Douglas-fir beams and columns throughout the building have been sandblasted and sealed to reveal and retain their original color.

### **Brick Walls**

The plaster covering the original brick walls has been removed in the elevator lobbies to expose a sample of the building’s initial interior wall surface.