

## Approved Concrete Mix Designs

Feb 3, 2023

| Concrete Supplier                                                                        | Mix Class-Agg     | Supplier ID | Air  | Slump | Design W/C | Binder        | *GWP (kgCO2eq/vd³) | Approved Use                                           | Date   |
|------------------------------------------------------------------------------------------|-------------------|-------------|------|-------|------------|---------------|--------------------|--------------------------------------------------------|--------|
| <b>CalPortland</b><br>(Includes Front Ave, Troutdale, and West Vancouver)                | 3000 psi - #4     | 0234FSLC    | 5.5% | 4"    | 0.50       | 530# 30% Slag | 198 - 199          | Commercial Grade Concrete (00440)                      | Dec-22 |
|                                                                                          | 3000 psi - 3/4"   | 0226FS      | 5.5% | 4"    | 0.57       | 470# 20% Slag | 185                | Commercial Grade Concrete (00440)                      | May-19 |
|                                                                                          | 3300 psi - 1"     | 0739LC2     | 5.5% | 4"    | 0.48       | 573# 37% Slag | 210-211            | Structural (00540) & Commercial Grade Concrete (00440) | Dec-22 |
|                                                                                          | 4000 psi - 1 1/2" | 0622CRLC    | 4.5% | 4"    | 0.44       | 611# 31% Slag | 242                | Structural Concrete (00540)                            | Dec-22 |
|                                                                                          | 5000 psi - 1 1/2" | 0634FSLC    | 4.5% | 4"    | 0.36       | 730# 35% Slag | 278                | Structural Concrete (00540)                            | Dec-22 |
|                                                                                          | 100 psi - CLSM    | 0570        | 7%   | 7"    | 2.52       | 188# Cmt      | 101                | Controlled Low Strength Materials (00442)              | Feb-19 |
|                                                                                          | 100 psi - CLSM    | 0974FS      | 8%   | 6"    | 0.64       | 475# 95% Slag | 82                 | Controlled Low Strength Materials (00442)              | Jan-23 |
| <b>Heidelberg (Cadman) Materials</b><br>(Includes Port of Portland and Foster Rd Plants) | 3500 psi - 1"     | 3411037     | 5.5% | 4"    | 0.47       | 570# 45% SCM  | 197 - 205          | Commercial Grade Concrete (00440)                      | Sep-22 |
|                                                                                          | 4000 psi - 3/8"   | 1599976     | 2.5% | 8.5"  | 0.45       | 750# 50% Slag | 246 - 250          | Drilled Shaft Concrete (00512)                         | May-22 |
|                                                                                          | 4000 psi - 3/8"   | 3408376     | 5.5% | 4"    | 0.48       | 680# 45% SCM  | 229 - 232          | Structural (00540) & Commercial Grade Concrete (00440) | Sep-22 |
|                                                                                          | 4000 psi - 3/8"   | 3403286     | 5.5% | 5"    | 0.47       | 700# 45% SCM  | 235 - 239          | Structural (00540) & Commercial Grade Concrete (00440) | Sep-22 |
|                                                                                          | 4000 psi - 3/4"   | 3428207     | 5.5% | 4"    | 0.45       | 600# 45% SCM  | 205 - 208          | Structural (00540) & Commercial Grade Concrete (00440) | Sep-22 |
|                                                                                          | 4000 psi - 1"     | 3419001     | 5.5% | 4"    | 0.46       | 600# 45% SCM  | 206 - 214          | Structural (00540) & Commercial Grade Concrete (00440) | Sep-22 |
|                                                                                          | 100 psi - CLSM    | 1593506     | 8%   | 8"    | 1.08       | 425# 71% Fly  | 86 - 106           | Controlled Low Strength Materials (00442)              | Dec-21 |
| <b>Knife River Sand &amp; Gravel</b>                                                     | 100 psi - CLSM    | 246HZA800   | 12%  | 8"    | 0.75       | 150# Cmt      | 65 - 98            | Controlled Low Strength Materials (00442)              | Jul-21 |
| <b>Wilsonville Concrete Products</b><br>(Includes Wilsonville & Beaverton)               | 3000 psi - 3/4"   | 3021A1050   | 5.0% | 4"    | 0.55       | 470# Cmt      | 180 - 182          | Commercial Grade Concrete (00440)                      | Jun-20 |
|                                                                                          | 3000 psi - 3/4"   | 3021A3050   | 5.0% | 4"    | 0.55       | 470# 30% Slag | 154                | Commercial Grade Concrete (00440)                      | Apr-21 |
|                                                                                          | 3000 psi - 3/4"   | 3036A3050   | 5.0% | 4"    | 0.55       | 470# 30% Slag | 154 - 156          | Commercial Grade Concrete (00440)                      | Jun-20 |
|                                                                                          | 3500 psi - 3/4"   | 3536A3055   | 5.0% | 4"    | 0.49       | 517# 30% Slag | 167                | Commercial Grade Concrete (00440)                      | Mar-21 |
|                                                                                          | 3500 psi - 3/4"   | 3536A1060   | 5.0% | 4"    | 0.44       | 564# 10% Slag | 221                | Structural (00540) & Commercial Grade Concrete (00440) | Jul-22 |
|                                                                                          | 3500 psi - 3/4"   | 3536A2060   | 5.0% | 4"    | 0.45       | 564# 20% Slag | 204                | Structural (00540) & Commercial Grade Concrete (00440) | Aug-22 |
|                                                                                          | 3500 psi - 1 1/2" | 3532A3060   | 5.0% | 4"    | 0.44       | 564# 30% Slag | 181                | Commercial Grade Concrete (00440)                      | Mar-21 |
|                                                                                          | 4000 psi - 3/8"   | 4014A3070   | 6.0% | 4"    | 0.39       | 658# 30% Slag | 214                | Structural (00540) & Commercial Grade Concrete (00440) | Aug-22 |
|                                                                                          | 4000 psi - 3/4"   | 4021A2070-E | 5.0% | 4"    | 0.40       | 647# 20% Slag | 234                | Structural (00540) & Commercial Grade Concrete (00440) | Jan-23 |
|                                                                                          | 4000 psi - 1 1/2" | 4032A3070   | 4.5% | 4"    | 0.39       | 658# 30% Slag | 206                | Pavement (756) & Structural (540)                      | Apr-21 |

Note: This list does not waive the responsibility of the contractor to provide quality control testing as outlined in the appropriate sections of the City Standard Specifications.

**Mix Designs Approved for Small Quantity (less than 50yd<sup>3</sup> per project)**

**Feb 3, 2023**

| <u>Concrete Supplier</u>            | <u>Mix Class-Agg</u> | <u>Supplier ID</u>      | <u>Air</u> | <u>Slump</u> | <u>Design W/C</u> | <u>Binder</u>    | <u>*GWP (kgCO<sub>2</sub>eq/yd<sup>3</sup>)</u> | <u>Approved Use</u>                                | <u>Date</u> |
|-------------------------------------|----------------------|-------------------------|------------|--------------|-------------------|------------------|-------------------------------------------------|----------------------------------------------------|-------------|
| <b>Alpha Ready Mix</b>              | 4000 psi - 3/4"      | 32453                   | 5.0%       | 4"           | 0.42              | 542# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | May-22      |
| <b>Cascade Concrete Products</b>    | 6000 psi - 1/2"      | Mix No. 1               | 2.0%       | 0"           | 0.37              | 600# Cmt         | No EPD/GWP submitted.                           | Precast Maintenance Holes, Bases, and Pipe (DD470) | Aug-22      |
|                                     | 6000 psi - 1/2"      | Mix No. 7               | 2.0%       | 27" Spread   | 0.41              | 850# 15% Fly Ash | No EPD/GWP submitted.                           | Precast Maintenance Holes, Bases, and Pipe (DD470) | Aug-22      |
|                                     | 6000 psi - 1/2"      | Mix No. 8               | 2.0%       | 27" Spread   | 0.41              | 850# Cmt         | No EPD/GWP submitted.                           | Precast Maintenance Holes, Bases, and Pipe (DD470) | Mar-22      |
| <b>Jakes Mobile Mix</b>             | 5000 psi - 3/4"      | 5000 PSI - Air          | 5.0%       | 4"           | 0.60              | 658# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | Jul-21      |
|                                     | 100 psi - CLSM       | COF-100psi/94lb         | 7%         | 4 - 7"       | 0.60              | 94# Cmt          | No EPD/GWP submitted.                           | Controlled Low Strength Materials (DD442)          | Sep-20      |
| <b>Meter Mix PDX</b>                | 4000 psi - 3/4"      | City Sidewalk 4000      | 5.0%       | 4"           | 0.42              | 611# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | Dec-21      |
| <b>Millers Mini Mix, LLC</b>        | 3500 psi - 3/4"      | 3500                    | 5.0%       | 4"           | 0.39              | 611# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | May-19      |
| <b>Oldcastle Infrastructure</b>     | 5000 psi - 1/2"      | Mix #1-DC-5000-STD      | 2.0%       | 0"           | 0.34              | 600# Cmt         | No EPD/GWP submitted.                           | Precast Maintenance Holes, Bases, and Pipe (DD470) | Feb-22      |
|                                     | 6000 psi - 1/2"      | Mix #9-SCC-6000-TYPE IL | 5.5%       | 27.5" Spread | 0.38              | 752# Cmt         | No EPD/GWP submitted.                           | Precast Maintenance Holes, Bases, and Pipe (DD470) | May-22      |
| <b>Oregon On-Site Concrete, LLC</b> | 3000 psi - 3/4"      | PDX 3000                | 5.0%       | 5"           | 0.52              | 450# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | Mar-21      |
|                                     | 4000 psi - 3/4"      | PDX 4000                | 4.5%       | 5"           | 0.48              | 550# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | Nov-20      |
| <b>Precision Mobil Mix</b>          | 3500 psi - 1"        | 3500COP                 | 6.0%       | 4"           | 0.49              | 540# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | Jul-21      |
|                                     | 4000 psi - 1"        | 4000COP                 | 6.0%       | 4"           | 0.49              | 588# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | Jul-21      |
| <b>Volume Concrete</b>              | 3000 psi - 3/4"      | 3000psi Mix - Rapid     | 5.0%       | 5"           | 0.39              | 705# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | Jun-20      |
|                                     | 3500 psi - 1/2"      | 3500psi Mix             | 5.5%       | 4"           | 0.60              | 564# Cmt         | No EPD/GWP submitted.                           | Commercial Grade Concrete (DD440)                  | Feb-19      |

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