

**project data:**

Project Address: 6753 West Mercer Way  
Mercer Island, WA 98040

Owner: Gautam and Minshah Velamoor  
17910 N.E. 90th St.  
Redmond, WA 98052

Parcel Number: 2251000089

Legal Description: EDEN LANE WEST TGW UND 1/7  
INT IN RECREATIONAL  
WATERFRONT & SH LDB ADJ

Zone: R-15

Minimum Lot Size: 15,000 SF

Actual Lot Size: 20,008 SF

Maximum Gross Floor Area: 45% of lot area  
9,003.6 SF

Gross Floor Area:  
Lower Floor Living Area: 2,517 SF  
Main Floor Living Area: 2,888 SF  
Upper Floor Living Area: 2,543 SF  
Total Living Area: 7,948 SF

Upper Floor Unfinished Storage: 659 SF

Lower Floor Mech/Storage:  
Garage: 238 SF  
881 SF

Lower Excluded Area (see A201): -1,000 SF

Total Gross Floor Area: 7,975 SF

Lot Slope: 16.10%

Maximum Impervious Surface: 35% of lot area + 5% variance  
6,063.2 SF

Actual Impervious Surface: 7,888.4 SF  
(see A201 for calculations)

**project contacts:**

Owner: Gautam and Minshah Velamoor  
17910 N.E. 90th St.  
Redmond, WA 98052

Architect: Demetrou Architects  
5588 Lakeview Drive, Suite 200  
Kirkland, WA 98033  
425.827.1700  
Project Architect: Amanda Cavazza  
amc@demetrou.net

**energy code compliance:**

**PRESCRIPTIVE APPROACH**  
(and Energy Credit Option 1a)

Insulation maximum U-factor:	0.28
slight maximum U-factor:	0.60
required R-value at ceilings:	R-49
required R-value at single rafter- or joist vaulted ceilings:	R-38
required R-value at wood framed walls:	R-21
required R-value at mass walls:	R-21
required R-value at walls - below grade:	R-10 exterior + TB R-15 interior + TB R-21 cavity + TB
required R-value at floors:	R-39
required R-value at slabs on grade:	R-10 perimeter R-10 under slab

**Lighting.** A minimum of 75% of permanently installed lamps in lighting fixtures shall be high-efficiency lamps. (WSEC 404.1)

**ADDITIONAL ENERGY EFFICIENCY REQUIREMENTS**

**Energy Credits Required.** Each dwelling shall comply with sufficient options from Table R402.2 so as to achieve the following minimum number of credits:  
- Large Dwelling Unit requirement: 2.5 points  
(exceeding 6,000 SF of conditioned floor area)

**Energy Credits Provided.**

**Insulation Credits.** Insulation 1a. Prescriptive compliance is based on Table R402.1.1 with the following modifications: Perimeter U=0.28, Floor R-38, Slab on grade R-10 perimeter and under entire slab, Below grade slab R-10 Perimeter and under entire slab. 0.5 points

**High Efficiency HVAC Equipment 2a.** Provide a gas-fired furnace with minimum of 85% efficiency. 0.5 points

**Efficient Water Heating 5a.** Water heating system shall include a gas water heater with a minimum EF of 0.82. 1.5 points

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**ARCHITECTURAL**

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