

# Operational Capacity Information



# Nominal vs Operational Capacity

- Nominal Capacity represents the student capacity of a school based on the following capacities per instructional space
  - Kindergarten 20 pupils per classroom
  - Elementary 25 pupils per classroom
  - Middle & Secondary 25 pupils per classroom and Vocational Modules
- Nominal Capacity forms the baseline capacity which will remain fixed, subject to changes being made in physical space i.e additions / renovations
- Operating Capacity – determined by adjusting the nominal capacity to reflect the grade structure and classroom student capacity
- Operating Capacity and Nominal Capacity maybe the same value, as will be the case for most Middle and Secondary Schools
- Note: Ministry designated nominal and operating capacity is used to make comparisons across the province, and is not a mandated or max capacity. School boards determine their own operating capacities, based on local decisions, and subject to the limits established by the School Act.

# Area Measurement

Room Modules- measured within the inside surfaces of main enclosing walls and partitions.

Undefined Boundaries – Passageways shall be assumed to be not less than 2m wide where circulation is likely.

Mezzanines – measured as normal floor space

Stages – Generally included as part of the main space served. i.e – stages in gym is included in the design space.

Ancillary Rooms – rooms less than 40m<sup>2</sup>, storage rooms, seminar rooms, included as main instructional space, only when directly accessible to that instructional space. Seminar Rooms 40m<sup>2</sup> and larger shall be measured as instructional space, regardless of access.

Instructional rooms between 80-120m<sup>2</sup> shall be recorded as only 80m<sup>2</sup> and extra space allocated as design space

Instructional rooms between 40-79m<sup>2</sup> or exceeding 120m<sup>2</sup> shall be recorded in full as the actual area

# Exceptions

- Substandard Space – determined by the Ministry to be substandard. i.e Basements with insufficient ceiling height
- Special Education - Area allowances for special education programs, such as learning assistance are included in core requirements for Elementary, Middle and Secondary Schools
- Non-Standard Programs – School Board may wish to offer programs for which no standard module area has been established. Such spaces will be designed on the individual basis



## Elementary Schools – Operating Capacity

- Operating Capacity of a school is based on the current average classroom capacity and the grade structure
  - Current Classroom Capacity
    - Kindergarten is 19 pupils per classroom
    - Elementary Grades 1-3 is 21 pupils per classroom
    - Elementary Grades 4-7 is 25 pupils per classroom
    - **Average classroom capacity for a grade 1-5 structure is 22.6**

# Design Sheet for Eagle View Elementary

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School Capacity: Nominal: Kindergarten - 40 Elementary - 225  
 Operating: Kindergarten - 38 Elementary - 203

This sheet is for use with the procedures in the Ministry of Education - Area Standards *24'*

Agreed Nominal / Operating Capacity:  
 Ministry of Education Date

PART 1 - BASIC AREAS					225	
Space Function	A - Existing	B - Allowable	C - Deficit	D - New		
Administration/Health	95.9	80.0	15.9			
Gen. Instruction ( 9 )	702.0	720.0	-18.0			
Gen. Storage	58.9	40.0	18.9			
Gym Activity	366.8	380.0	-13.2			
Gym Ancillary	57.9	65.0	-7.1			
Media/Tech. Centre	185.4	160.0	25.4			
Multi - Purpose	80.2	80.0	0.2			
Spec. Education	91.3	120.0	-28.7			
Mechanical	47.1	60.0	-12.9			
Kindergarten <i>21</i>	158.0	180.0	-22.0			
Strong Start Centre						
Design Space	578.9	430.0	148.9			
* Other						
Sub-Total	Ai 2422.4	Bi 2315.0	107.4	Di		

\* Surplus classroom area included in DESIGN space = 0.8

ENROLMENT:		Grade Structure: K to 5		SITE ALLOWANCE: (Ha)	
Kgn:		Type-1:		Allow.	1.5
Gr. 1-7:		Type-2:		Actual	5.5
Gr. 8-12:		Port. CR's:		Diff.	-4.0

Comments:  
 Capacity Reflects Full Day Kindergarten:  
 Eagle View Elementary approximates the space allowances for a 40K+225 nominal capacity elementary school.

*Ministry shows 20+250  
19+226 ) Sept 2012*

\* Other **E-FILED**

PART 2 - TOTAL AREAS

# Calculating Elementary School Operating Capacity

- Determine # Kindergarten Classrooms = 2 (158 m<sup>2</sup> ~2 classrooms)
- Determine # 1-5 Classrooms =9  
702m<sup>2</sup> (General Instruction Space)  
+80.2m<sup>2</sup> (Multi –purpose room)  
-91.3 m<sup>2</sup> (Special Education allocation)

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690.9 m<sup>2</sup> ÷ 80m<sup>2</sup> (classroom size) =8.63~9 classrooms

K=2 \*19(Av classroom capacity) = 38

E=9\* 22.6 (Av classroom cap for grades 1-5) = 203.4

- **Operating Capacity = 38 + 203 = 241 (Eagle View Elementary)**
- Nominal Capacity = 40 + 225

# Middle and Secondary Schools

- Current pupil capacity construction module for middle and secondary schools is 25
- Since nominal capacity is based on the same criteria, middle and secondary schools will have the same nominal and operating capacities.



# Secondary School Module Areas

<u>Space Function</u>	<u>Module Area</u>
General Instruction	80 m <sup>2</sup>
Science (incl. ancillary)	140 m <sup>2</sup>
Fine Arts (incl. ancillary)	
Choral Music	120 m <sup>2</sup>
Art	140 m <sup>2</sup>
Drama & Theatre (200-950 nominal cap.)	150 m <sup>2</sup>
Drama & Theatre (1000+ nominal cap.)	250 m <sup>2</sup>
Music	180 m <sup>2</sup>
Industrial Education	
Drafting	120 m <sup>2</sup>
Technology (existing Electricity/Electronics)	140 m <sup>2</sup>
Metalwork (use in determining existing cap.)	200 m <sup>2</sup>
Mechanics	230 m <sup>2</sup>
Construction (Wood)	275 m <sup>2</sup>
Home Economics	
Separate Clothing or Foods Room	120 m <sup>2</sup>
Combined Clothing/Foods Room	160 m <sup>2</sup>
Teaching Kitchen	180 m <sup>2</sup>
Business Education	120 m <sup>2</sup>
Computers	120 m <sup>2</sup>



**DESIGN AID SHEET FOR SECONDARY SCHOOLS – SHEET # 1**

School Name: OAK BAY SECONDARY SCHOOL Facility Code: \_\_\_\_\_  
 District: 61 GREATER VICTORIA  
 School Capacity: Nominal - 1300 Total Elective Modules: 26  
 Operating - AS ABOVE Extend Day: NO

Last Updated: 17/2/2011  
 Printed Date: 26/4/2011

Agreed Nominal / Operating Capacity:	
Ministry of Education	Date

This sheet is for use with the procedures in the Ministry of Education - Area Standards

**PART 1 - ACADEMIC / VOCATIONAL**

Space	Function	1A - PROPOSED			1B - MODULES			1C - NEW CORE			1D - NEW ELECTIVE			
		Description	Area	Mods	Core	Deficit	Surplus	Description	Area	Mods	Description	Area	Mods	
Business Education		Business Ed. (2)	2.03	244.00	2.00	1.00	1.00							
Fine Arts		Art (3)	3	420.00	3.00	1.00	6.00							
		Music	1	180.00	1.00									
		Choral	1	120.00	1.00									
		Dance	1	120.00	1.00									
		Drama	1	250.00	1.00									
Home Economics		Foods (2)	2	242.00	2.00	1.00	2.00							
		Clothing	1	122.00	1.00									
Industrial Education		Mechanics	1.00	245.00	1.00	1.00	3.00							
		Construction (wood)	1	272.00	1.00									
		Technology (2)	2	280.00	2.00									
Science		General Science (2)	2.08	292.00	2.00	5.00	3.00							
		Chemistry (2)	2.08	292.00	2.00									
		Physics (2)	2.08	282.00	2.00									
		Biology (2)	2.08	282.00	2.00									
Computers		Computers (2)	2.03	242.00	2.00	0.00	2.00							
General Instruction		Instructional Space		2050.00	25.00	16.00	9.00	Area = No. of modules x 80 m2			Area = No. of modules x 80 m2			
Sub-totals		All		5935.00		25.00	0.00	26.00	BI	CI	0.00	DI	0.00	0.00

11.00 x 8.50 in

to be used except for spaces agreed in writing by the Ministry

Surplus + Deficit = 26.00



# Calculating Secondary School Operating Capacity

Calculate the Module Rating

Module Rating = Actual Area of Module / Area of equivalent module in 2.8.3

Example Business Education Mod =  $244 / 120 = 2.03$

Add up all Module Ratings , for Oak Bay this value = 26.43

2. Calculate Number of General Instructional Spaces

Oak Bay General Instructional Space =  $2050 \text{ m}^2$  (Total Area) /  $80 \text{ m}^2$  ( Gen Instructional Mod Area)  
=25.63

3. Operational Capacity =  $(26.43 + 25.63) * 25$  (Av Classroom Capacity Table 2.4.1)= 1301.5 ~1300

# Core Area of Instructional, Design and Mechanical Space for Junior Middle School based on Nominal Capacity

## Junior Middle School – Grade 6-8

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Space Function	NOMINAL CAPACITY																
	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Core area in (m2)																	
Admin./ Health	125	135	145	155	155	155	190	190	190	190	190	210	210	210	210	210	210
Counselling	50	50	50	50	50	50	50	50	50	50	50	50	50	60	60	60	60
General Storage	60	60	70	70	80	80	90	90	90	90	100	100	100	100	105	105	105
Gym Activity	500	500	500	500	500	600	600	600	600	600	600	600	600	750	750	750	750
Gym Ancillary	100	100	100	100	100	150	150	150	150	150	150	150	150	200	200	200	200
Media/ Tech. Centre	225	235	250	255	265	270	280	290	310	320	330	340	350	355	365	375	385
Multi-Purpose	100	100	100	100	100	160	160	160	160	160	240	240	240	240	240	240	240
Special Ed.	100	160	160	160	240	240	240	320	320	320	400	400	400	480	480	480	560
<b>Total</b>	<b>1260</b>	<b>1340</b>	<b>1375</b>	<b>1390</b>	<b>1490</b>	<b>1705</b>	<b>1760</b>	<b>1850</b>	<b>1870</b>	<b>1880</b>	<b>2060</b>	<b>2090</b>	<b>2100</b>	<b>2395</b>	<b>2410</b>	<b>2420</b>	<b>2510</b>
<b>Junior Middle Sch.</b>																	
Instructional Space	880	1115	1295	1500	1660	1820	1980	2140	2300	2500	2660	2820	3000	3160	3340	3540	3700
Mechanical Space (3%)	80	95	105	110	120	135	145	155	160	170	180	190	195	215	220	230	240
Design Space (28%)	600	690	750	810	880	990	1050	1120	1170	1225	1320	1375	1430	1555	1610	1670	1740
<b>Max. Gross Area</b>	<b>2820</b>	<b>3240</b>	<b>3525</b>	<b>3810</b>	<b>4150</b>	<b>4650</b>	<b>4935</b>	<b>5265</b>	<b>5500</b>	<b>5775</b>	<b>6220</b>	<b>6475</b>	<b>6725</b>	<b>7325</b>	<b>7580</b>	<b>7860</b>	<b>8190</b>
<b>Senior Middle Sch.</b>																	
Instructional Space	1020	1180	1335	1540	1700	1920	2100	2320	2480	2685	2865	2945	3135	3370	3530	3710	3965
Mechanical Space (3%)	90	95	105	110	125	140	150	160	170	175	190	195	200	220	230	235	250
Design Space (28%)	640	705	760	820	895	1015	1080	1170	1220	1280	1380	1410	1465	1615	1665	1715	1815
<b>Max. Gross Area</b>	<b>3010</b>	<b>3320</b>	<b>3575</b>	<b>3860</b>	<b>4210</b>	<b>4780</b>	<b>5090</b>	<b>5500</b>	<b>5740</b>	<b>6020</b>	<b>6495</b>	<b>6640</b>	<b>6900</b>	<b>7600</b>	<b>7835</b>	<b>8080</b>	<b>8540</b>

8.50 x 11.00 in

# Middle School Module Areas

<u>Space Function</u>	<u>Module Area</u>
General Instruction	80 m <sup>2</sup>
Science (incl. ancillary)	100 m <sup>2</sup>
Fine Arts (incl. ancillary)	
Choral Music	100 m <sup>2</sup>
Art	120 m <sup>2</sup>
Drama & Theatre	120 m <sup>2</sup>
Music	160 m <sup>2</sup>
Industrial Education	
Drafting	110 m <sup>2</sup>
Technology	125 m <sup>2</sup>
General Shop	155 m <sup>2</sup>
Home Economics	
Separate Clothing or Foods Room	110 m <sup>2</sup>
Combined Clothing/Foods Room	140 m <sup>2</sup>
Business Education	100 m <sup>2</sup>

# Design Sheet for Colquitz Middle School

**DESIGN AID SHEET FOR MIDDLE SCHOOLS -- SHEET #1**

GRADES: 6 to 8

Last Updated: 2/19/21

School Name: COLQUITZ MIDDLE SCHOOL

Facility Code: 61068

Printed Date: 2004/10/04

District: 61 (GREATER VICTORIA)

School Capacity: Nominal - E: 375 S: 175 Total Elective Modules: 1  
 Operating - as above

**Agreed Nominal / Operating Capacity:**

Ministry of Education

Date

This sheet is for use with the procedures in the Ministry of Education - Area Standards

**PART 1 - ACADEMIC/VOCATIONAL**

Space Function	1A - EXISTING			1B - MODULES			1C - NEW CORE			1D - NEW ELECTIVE		
	Description	Area	Mods	Core	Deficit	Surplus	Description	Area	Mods	Description	Area	Mods
Business Education	Business	78.2	0.78	1.00	0.22							
Fine Arts	Music	196.9	1.23	1.00		1.23						
	Art	131.2	1.00									
Home Economics	Food+Clothing	135.2	1.00	1.00								
Industrial Education	General Shop	200.2	1.29	1.00		0.29						
Science	Science	86.2	0.86	1.00	0.14							
Other *												
General Instruction	( 9 ) rooms 75-95 m2	698.6	9.00	E: 15.00	0.71		Area = No. of modules x 80 m2			Area = No. of modules x 80 m2		
	( 8 ) other rooms	583.3	7.29									
Sub-totals		Ai 2109.8	22.45		1.07	1.52	Bi	Ci			Di	Dii

FILED  
 DATE: 08/25/11

\* Note - May not be used except for spaces agreed in writing by the Ministry. Surplus - Deficit = 0.45





## Calculating Middle School Capacity

- Current pupil capacity construction module for middle schools is 25
- The Operating/Nominal Capacity has an Elementary and Secondary component
- Add the Mod component (Colquitz=6.16 ~6)
- Large Room Capacity ( $698.6\text{m}^2 / 80\text{m}^2 = 8.7 \sim 9$ )
- Small Room Capacity ( $583.3\text{m}^2 / 80\text{m}^2 = 7.29 \sim 7$ )
- Operating Capacity = Mods + Rooms =  $(6 + 7 + 9) * 25 = 550$
- **E= Elementary Operating Capacity** = Mods + Lg Room =  $(6 + 9) = 15$ 
  - $15 * 25 = 375$
- $S = (\text{Sm Room} + \text{Deficit}) - \text{Mods} = (7 + 1.07) - 6 = 2.01 \sim 2$
- **Secondary Capacity** = Operating Capacity (550) - Elementary (375) = **175**

Total Operating Capacity = 550

E: 375 S:175