

INPUT

EST. NUMBER

E95054

PROJECT

HUSKY

LOCATION

ROOF PLY

BEAM BAYS

24

SPAN

35

ft

OWSJ BAYS

24

SPAN

45

ft

CLEAR HGHT

41

ft

WALL TYPE

ESTIMATOR

DANIEL WERBOWY

STEEL BUILDING ESTIMATOR

WRW ~ CORNEE ENGINEERING SOLUTIONS

905-279-5455

TORONTO

CANADA

SUMMARY

ESTIMATE NO : E95054
PROJECT : HUSKY
LOCATION : TORONTO
ESTIMATOR : DANIEL WERBOWY

BEAM SPAN ft : 35.00 BEAM BAYS : 24
OWSJ SPAN ft : 45.00 OWSJ BAYS : 24
CLEAR HEIGHT ft : 41.00
BLD HGHT ft : 44.00

ROOF TYPE : 4PLY
WALL TYPE : SIDING

DEAD LOAD psf : 19
LIVE LOAD psf : 25

TOTAL AREA : 911044 ft 2

TOTAL WGHT

2560.7 tons
5.62 psf

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TOTAL AREA : 911044 ft 2

DESCRIPTION	NO.	SECTION	LENGTH			TOT WGT	TOTAL	UNIT
			plf	ft	in			
BEAMS								
INT DBL CANT	230	W 18	X	45	47	0	486450	
EXT DBL CANT	23	W 21	X	48	47	0	51888	
SINGLE CANT	23	W 21	X	55	41	0	51865	
INT. DROP IN	253	W 16	X	36	23	0	209484	
EXT. DROP IN	23	W 18	X	45	29	0	30015	
END WALL	96	W 8X	X	18	17.5	0	30240	
SIDE WALL	96	W 8	X	14	22.5	0	30240	
ALLOWANCE FOR MECH PT LOADS							500	
ALLOWANCE FOR MECH SPU							500	
							891182	0.98
COLUMNS								
INTERIOR	529	HSS	10 x 0.5	62.5	45	0	1487813	
END WALL	98	WF	12 X	65	45	0	286650	
SIDE WALL	46	WF	12 X	65	45	0	134550	
SIDE WALL WC	48	WF	12 X	65	45	0	140400	
	721							
BASE PLATES								
INTERIOR	529	PL	11 X 1.0	37.4	0	17	28028	
END WALL	98	PL	13 X 0.75	33.2	0	19	5144	
SIDE WALL	46	PL	13 X 0.75	33.2	0	19	2414	
SIDE WALL WC	48	PL	13 X 0.75	33.2	0	19	2519	
ANCHOR BLTS	1482		0.75 DIA	1.5	2	0	4450	
							2091968	2.30
OWSJ								
	3432		30 " X	11.5	45	0	1776060	
BRIDGING	1	L	1/2X1/2X1/8 X	1.23	120960	0	148781	
MECH ALLOWANCE ON OWSJ							500	
SPU ALLOWANCE ON OWSJ							500	
							1925841	2.11
BRACING								
END WALL	20	L	4X4X.25 X	6.6	56	0	7421	
SIDE WALL	20	L	6X4X.3125 X	10.3	63	0	12965	
ROOF ANGLE	1	L	3X3X.25 X	4.9	3848	0	18855	
BASE ANGLE	1	L	3X3X.25 X	4.9	3848	0	18855	
GIRTS								
END WALL	480	LC	8 X	4.52	17.5	0	37968	
SIDE WALL	480	LC	10 X	5.74	22.5	0	61992	
SAG RODS	480		0.5 DIA	0.667	7	0	2349	
MECHANICAL								
UNITS	16	C	6 X	8.2	###	0	765	
FANS	12	L	5X3X.25 X	6.6	###	0	462	
DOORS								
M/D 3 X 6	0	C	8 X	11.5	15	0	0	
O/H 8 X 8	0	C	8 X	11.5	24	0	0	
O/H 12 X 14	0	C	10 X	15.3	40	0	0	
							5070624	
MISC ALLOWANCE							50706	
2.5 % of total								
TOTAL							5121330	5.62
							2560.7	tons

ESTIMATE NUMBER	OWNER
PROJECT	PROJECT
LOCATION	TORONTO

BUILDING PARAMETERS			
COLS SPAN	30.0 0	BEAM BAYS	20
COLS SPAN	40.0 0	OWG BAYS	20
CLEAR HEIGHT	41.00 0		
WALL CWT	40.0 0		
WALL CWT	40.0 0		
CRF CWT	1.00 0		

WALL CONSTRUCTION	GRC	EXTERIOR COLM	-	460
ROOF CONSTRUCTION	PLY	EXTERIOR COLM	-	9F

TOTAL QUANTITIES	
SINGLE CONTIGUOUS	20
EXT DOUBLE CONTIGUOUS	20
INT DOUBLE CONTIGUOUS	200
NO JOIN	200
EXT JOIN IN	20
INTERNAL INTERMED COLS	1
INT WALL INTERMED COLS	1
NO JOIN WALL INTERM	0
NO JOIN WALL INTERM	0
NO JOIN WALLS	4
NO TRUSS	1
NO HD DOORS (3.0 X 8.0)	0
NO OH DOORS (3.0 X 8.0)	0
NO OH DOORS (1.0 X 7.0)	0

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SNOW LOADS

Ss = 0.8 kpa 16.7 psf
 Sr = 0.4 kpa 8.4 psf

WIND LOADS

1/30 = 0.48 kpa 10.0 psf
 1/10 = 0.39 kpa 8.2 psf

DEAD LOAD

SERVICE

FACTORED

4PLY	0.29 kpa	6.06 psf			
INSULATION	0.1 kpa	2.09 psf			
DECK	0.1 kpa	2.09 psf			
MECH & ELEC	0.14 kpa	2.93 psf			
OWSJ SW	0.14 kpa	2.93 psf			
STEEL SW	0.14 kpa	2.93 psf			

TOTAL 0.91 kpa 19.02 psf X 1.25 = 1.14 kpa 23.77 psf

LIVE LOAD 1.2 kpa 25.08 psf X 1.5 = 1.80 kpa 37.62 psf
 (.8 X Ss + Sr)

TOTAL 2.11 kpa 44.10 psf 2.94 kpa 61.39 psf

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QUANTITY 3432
OWSJ SPACES 6
SPACING ### ft
DEPTH 30 in
SPAN 45 ft
UDL 240 plf

OWSJ SIZE 30 " X 11.5 plf

BRIDGING LINES 3

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WALL TYPE : GIRTS

q fact 33.1 psf
 BLDG HT 44.00 ft
 NO OF GIRT SPACES 6
 NO OF GIRTS 5
 SPACING 7.33 ft
 UDL 0.243 klf

END WALL L = 17.50 ft
 Mf = 9.29 ft-k 11.88
SIZE : LC 8 X 4.52 plf

SIDE WALL L = 22.50 ft
 Mf = 15.36 ft-k 17.24
SIZE : LC 10 X 5.74 plf

SAG RODS 480

CMRM GIRT CAPACITIES

Mr	Depth	wt/ft
11.88	8	4.52
15.18	8	5.23
17.24	10	5.74
21.24	12	6.36
21.58	10	6.66
25.24	14	6.97
26.7	12	7.37
31.87	14	8.09

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INTERIOR TYPE = HSS
 Lx ,Ly 44.00 ft
 Cf 106.36 kips
HSS 10 X 0.5 @ 62.5 plf

END WALL COLS TYPE = WF
 Lx ,Ly 44.00 ft UDL 1/10= 0.242 kif
 Cf 24.17 kips
 Mf 108.34 ft-kips
WF 12 X @ 65 plf

SIDE WALL MAIN COLUMNS TYPE = WF
 Lx ,Ly 44.00 ft UDL 1/10= 0.312 kif
 Cf 48.35 kips
 Mf 139.29 ft-kips
WF 12 X @ 65 plf

SIDE WALL WIND COLUMNS TYPE = WF
 Lx ,Ly 44.00 ft UDL 1/10= 0.312 kif
 Cf 8.06 kips
 Mf 139.29 ft-kips
WF 12 X @ 65 plf

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END WALL

SPAN	17.50 ft			8X18	18
TRIB WDTH	23.50 ft				
UDL	1.443 klf	Mf =	55.2 ft-kips	W 8X	X 18

SIDE WALL

SPAN	22.50 ft			8X14	14
TRIB WDTH	5.83 ft				
UDL	0.358 klf	Mf =	22.66 ft-kips	W 8	X 14

INTERIOR DROP IN NO: 253

SPAN	23 ft	Rf 100 =	31.77 kips	16X36	36
TRIB WDTH	45 ft	Rf 50 =	22.04 kips		
UDL	2.76 klf	Mf =	182.68 ft-kips	W 16	X 36

EXTERIOR DROP IN NO: 23

SPAN	29 ft	Rf 100 =	40.06 kips	18X45	45
TRIB WDTH	45 ft	Rf 50 =	27.79 kips		
UDL	2.76 klf	Mf =	290.43 ft-kips	W 18	X 45

INTERIOR DOUBLE CANT NO: 230 CANT= 6.00 BMDB10 BMDB12
18X45 18X45

SPAN	35 ft	Rf 50 =	22.04 kips	256.33	45	45
TRIB WDTH	45 ft	UDL 50 =	1.92 klf			
UDL	2.76 klf	Mf pos =	256.33 ft-kips			
Lu	12 ft	Mf neg =	240.36 ft-kips	W 18	X 45	

EXTERIOR DOUBLE CANT NO: 23 CANT= 6.00 290.09 BMDB10 BMDB12
21X48 21X48

SPAN	35 ft	Rf 50 =	27.79 kips	48	48
TRIB WDTH	45 ft	Rfr 50 =	22.04 kips		
UDL	2.76 klf	UDL 50 =	1.92 klf		
Lu	12 ft	Rf left=	88.62 kips		
		V=0 @ X =	17.86 ft from left support		
		Mf pos =	239.26 f-k		
		Mf neg =	290.09 f-k	W 21	X 48

SINGLE CANTILEVER NO: 23 CANT= 6.00 343.79 BMDB10 BMDB12
21X55 21X55

SPAN	35 ft	Rf 50 =	22.04 kips	55	55
TRIB WDTH	45 ft	UDL 50 =	1.92 klf		
UDL	2.76 klf	Rf left=	43.58 kips		
Lu	12 ft	V=0 @ X =	15.78 ft from left support		
		Mf pos =	343.79 f-k		
		Mf neg =	240.36 f-k	W 21	X 55

0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0
0	W	0	X	0	0	0	0

TOTAL 0
0.00

TOTAL
lbs

UNIT
psf



tons

