



BASIC MATERIALS ESTIMATING WORKSHEET

PS•4000 Flat Wall Forms

1. PolySteel Forms. You must know the total linear feet of walls to be formed and the height of each wall.

_____ Total Wall Lengths Divided by 4 = _____ Forms per course
 _____ PS•4000-2 Forms Per Course X _____ Courses = _____ PS•4000-2 Gross Wall Forms
 _____ PS•4000-2 Gross Wall Forms - _____ * Window & Door Area Forms = _____ PS•4000-2 Net Wall Forms
 _____ PS•4000-1 Forms Per Course X _____ Courses = _____ PS•4000-1 Net Wall Forms**
 _____ PS•4000-2 Corners X _____ Courses = _____ PS•4000-2 Corner Forms ... _____
 _____ PS•4000-1 Corners X _____ Courses = _____ PS•4000-1 Corner Forms ... _____
 _____ PS•4000-2 Net Wall Forms - _____ PS•4000-2 Corner Forms = _____ PS•4000-2 Straight Forms ... _____
 _____ PS•4000-1 Net Wall Forms - _____ PS•4000-1 Corner Forms = _____ PS•4000-1 Straight Forms ... _____

* Take window and door opening area X 80% then divide by 8.00 to determine forms to be deducted for openings.
 ** Assumes 12" forms are at top of wall and no PS•4000-1 Forms are eliminated from window and door openings.

2. Reinforcing Steel (Rebar). You must know the spacing of the vertical and horizontal rebar required.

Horizontal.

Perimeter Length _____ Divided by 16 = _____ X _____ Horizontal Rebar Runs = 20' Rebar ... _____ pcs.

Vertical.

Perimeter Length _____ Divided by Foot Spacing _____ = Rebar (wall height) _____ in length ... _____ pcs.

Openings. Per Engineered Design

3. Concrete. Concrete should be a minimum 2,500 psi mix with 1/2" or less aggregate and delivered at a 5" slump.

| | | |
|-----------------|-----------------------------------------------------------|------------|
| _____ PS•4600-2 | 6" Straight Forms Divided by 6.75 Forms per yard | _____ yds. |
| _____ PS•4645-2 | 6" 45° Corner Forms Divided by 24.35 Forms per yard | _____ yds. |
| _____ PS•4690-2 | 6" 90° Corner Forms Divided by 7.5 Forms per yard | _____ yds. |
| _____ PS•4800-2 | 8" Straight Forms Divided by 5 Forms per yard | _____ yds. |
| _____ PS•4845-2 | 8" 45° Corner Forms Divided by 16.75 Forms per yard | _____ yds. |
| _____ PS•4890-2 | 8" 90° Corner Forms Divided by 5.5 Forms per yard | _____ yds. |
| _____ PS•4600-1 | 6" Straight Forms Divided by 13.5 Forms per yard | _____ yds. |
| _____ PS•4645-1 | 6" 45° Corner Forms Divided by 48.7 Forms per yard | _____ yds. |
| _____ PS•4690-1 | 6" 90° Corner Forms Divided by 15 Forms per yard | _____ yds. |
| _____ PS•4800-1 | 8" Straight Forms Divided by 10 Forms per yard | _____ yds. |
| _____ PS•4845-1 | 8" 45° Corner Forms Divided by 33.5 Forms per yard | _____ yds. |
| _____ PS•4890-1 | 8" 90° Corner Forms Divided by 11 Forms per yard | _____ yds. |

TOTAL CONCRETE FOR FORMS _____ yds.

(Consult with your concrete supplier or pumper to determine the amount of any additional concrete required for the placement system being used.)

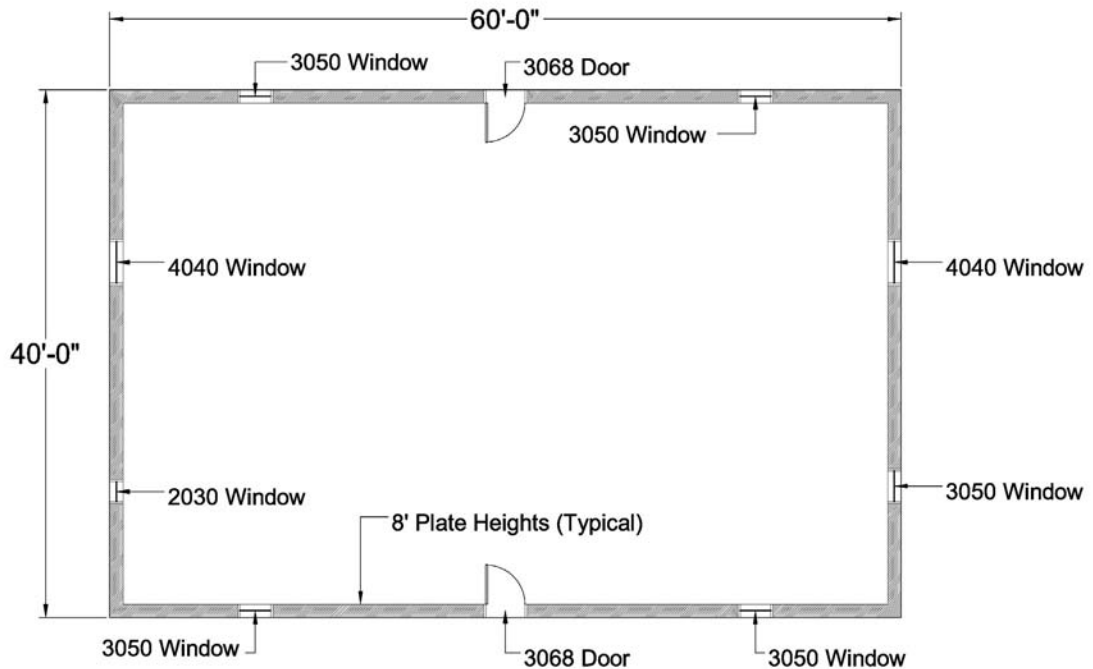
4. VBuck. You must know the number and size of the window and door rough openings you want to form.

VBuck. Perimeter of Openings _____ Divided by 16 = _____ (Round up to next largest number and add 1 piece per every 10 openings) = _____ pieces of VBuck.

Connectors. Window Openings X 8 for 6" Forms + Door Openings X 4.
 Add center connectors for 11" VBuck and larger.

B.2.1 ESTIMATING EXAMPLE

ESTIMATING BASIC MATERIALS EXAMPLE



The diagram above illustrates a 2,400 sq. ft. house (60' X 40'), with four corners and a wall height of 8 feet. It also has the following openings:

| <u>Description</u> | <u>Sq. Ft. of Wall Area</u> | <u>Linear Feet of Buck Material</u> |
|--------------------|-----------------------------|-------------------------------------|
| (2) 3068 doors | 3 X 7 X 2 = 42 | (3 + 7 + 7) X 2 = 34 |
| (5) 3050 Windows | 3 X 5 X 5 = 75 | (3 + 3 + 5 + 5) X 5 = 80 |
| (1) 2030 Window | 2 X 3 X 1 = 6 | (2 + 2 + 3 + 3) X 1 = 10 |
| (2) 4040 Windows | 4 X 4 X 2 = 32 | (4 + 4 + 4 + 4) X 2 = 32 |
| TOTALS | <u>155 sf.</u> | <u>156 lf.</u> |

The following sample BASIC MATERIALS ESTIMATING WORKSHEET (Figure 2.1) has been completed using this project.

Note: In determining the number of forms to subtract from the Gross Wall Total for Window and Door Area Forms, you must divide the square footage of wall area for these openings by 8, the number of sq. ft. in each PS•4000 Form, and multiply that total by .8 to allow for waste. You need to calculate the total linear feet of the openings in order to determine how much VBuck material to order.

We will use this same project to calculate the labor required for installation in Section B.3.



FIGURE 2.1 BASIC MATERIALS ESTIMATING WORKSHEET EXAMPLE

PS•4000 Flat Wall Forms

1. **PolySteel Forms.** You must know the total linear feet of walls to be formed and the height of each wall.

| | | | | |
|------------|-----------------------------------|-----------|------------------------------|-----------------------------------------|
| <u>200</u> | Total Wall Lengths Divided by 4 = | <u>50</u> | Forms per course | |
| <u>50</u> | PS•4000-2 Forms Per Course X | <u>4</u> | Courses = | <u>200</u> PS•4000-2 Gross Wall Forms |
| <u>200</u> | PS•4000-2 Gross Wall Forms - | <u>15</u> | * Window & Door Area Forms = | <u>185</u> PS•4000-2 Net Wall Forms |
| | PS•4000-1 Forms Per Course X | | Courses = | PS•4000-1 Net Wall Forms** |
| <u>4</u> | PS•4000-2 Corners X | <u>4</u> | Courses = | PS•4000-2 Corner Forms ... <u>16</u> |
| | PS•4000-1 Corners X | | Courses = | PS•4000-1 Corner Forms ... |
| <u>185</u> | PS•4000-2 Net Wall Forms - | <u>16</u> | PS•4000-2 Corner Forms = | PS•4000-2 Straight Forms ... <u>169</u> |
| | PS•4000-1 Net Wall Forms - | | PS•4000-1 Corner Forms = | PS•4000-1 Straight Forms ... |

* Take window and door opening area X 80% then divide by 8.00 to determine forms to be deducted for openings.
** Assumes 12" forms are at top of wall and no PS•4000-1 Forms are eliminated from window and door openings.

2. **Reinforcing Steel (Rebar).** You must know the spacing of the vertical and horizontal rebar required.

Horizontal.

Perimeter Length 200 Divided by 16 = 12.5 X 2 Horizontal Rebar Runs = 20' Rebar ... 25 pcs.

Vertical.

Perimeter Length 200 Divided by Foot Spacing 2 = Rebar (wall height) 8' in length ... 100 pcs.

Openings. Per Engineered Design

3. **Concrete.** Concrete should be a minimum 2,500 psi mix with 1/2" or less aggregate and delivered at a 5" slump.

| | | | | |
|------------|-----------|-----------------------------------------------------------|-----------|------|
| <u>169</u> | PS•4600-2 | 6" Straight Forms Divided by 6.75 Forms per yard | <u>25</u> | yds. |
| | PS•4645-2 | 6" 45° Corner Forms Divided by 24.35 Forms per yard | | yds. |
| <u>16</u> | PS•4690-2 | 6" 90° Corner Forms Divided by 7.5 Forms per yard | <u>3</u> | yds. |
| | PS•4800-2 | 8" Straight Forms Divided by 5 Forms per yard | | yds. |
| | PS•4845-2 | 8" 45° Corner Forms Divided by 16.75 Forms per yard | | yds. |
| | PS•4890-2 | 8" 90° Corner Forms Divided by 5.5 Forms per yard | | yds. |
| | PS•4600-1 | 6" Straight Forms Divided by 13.5 Forms per yard | | yds. |
| | PS•4645-1 | 6" 45° Corner Forms Divided by 48.7 Forms per yard | | yds. |
| | PS•4690-1 | 6" 90° Corner Forms Divided by 15 Forms per yard | | yds. |
| | PS•4800-1 | 8" Straight Forms Divided by 10 Forms per yard | | yds. |
| | PS•4845-1 | 8" 45° Corner Forms Divided by 33.5 Forms per yard | | yds. |
| | PS•4890-1 | 8" 90° Corner Forms Divided by 11 Forms per yard | | yds. |

TOTAL CONCRETE FOR FORMS 28 yds.

(Consult with your concrete supplier or pumper to determine the amount of any additional concrete required for the placement system being used.)

4. **VBuck.** You must know the number and size of the window and door rough openings you want to form.

VBuck. Perimeter of Openings 156 Divided by 16 = 9.75 (Round up to next largest number and add 1 piece per every 10 openings) = 11 pieces of VBuck.

Connectors. Window Openings X 8 for 6" Forms + Door Openings X 4.
Add center connectors for 11" VBuck and larger.