



# Building a deck



step by step



# Prepare for your project

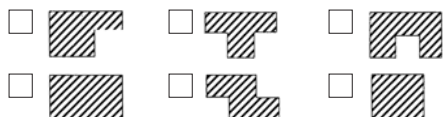
# 1

You can create a free-form deck of virtually any shape, single or multi-level, up to 60 x 60 feet in size and 8 feet in height.

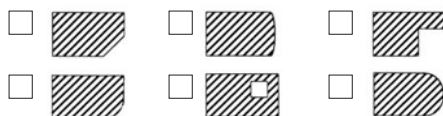
- ▶ All it takes is a few minutes of your time to **answer the questions on the following pages and sketch your deck design on the graph.** Use the handy drawings provided which show typical deck planking and railing styles — to get you started.
- ▶ First and foremost, carefully go over the plan for your property which details its official boundaries. If the information is not complete, hire a surveyor. The orientation of your deck is also important. Plan and position your deck in relation to the sun's trajectory (during the summer) and take into account the location of trees, buildings, etc. You may be able to avoid prevailing winds by locating your deck where the house will provide some protection.

## The deck

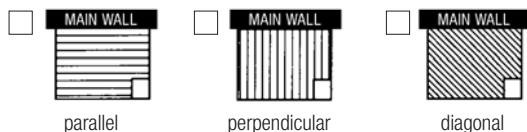
1. Determine the **basic deck** shapes.



2. **Deck modifications.**



3. The alignment of the **deck planking with the main wall** of your house.



4. Will it be a **multi-level deck**?

- 1-level deck
- 2-level deck
- 3-level deck

5. At its highest point, what is the **height from the ground to the top of the finished deck floor?**  
Height: \_\_\_\_\_

6. Will the deck be **attached to the house or will it be free-standing?**

- Attached
- Free-standing

7. Select **centre to centre joist spacing.**

(If you are unsure, use 16 in.)

- 12 in. on centre
- 16 in. on centre
- 24 in. on centre

8. Select the type of material for your **deck support.**

- Treated-wood
- Cedar
- Concrete
- Steel

9. Select the material for your **deck planking and railings.**

- Treated-wood
- Cedar
- Trex composite lumber
- PVC

10. What size of **deck plank** do you plan to use?

- 2 x 4 in.
- 2 x 4 po / 2 X 6 in. alternating
- 2 x 6 in.
- 1 1/4 x 6 in. radius edge

11. What size material do you plan to use for the **railing post?**

- 2 x 4 in.
- 4 x 4 in.

12. How will you **secure** your deck planking?

- Nails
- Screws

13. What **finish** do you plan to use on your deck ?

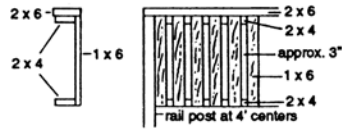
- Water-repellent Sealer
- Stain
- Paint
- Seal
- None

## Prepare for your project (cont'd)

# 2

### Railing style

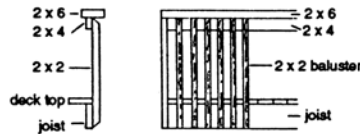
- 1 x 6 in. Screening, 2 x 6 in. Top rail



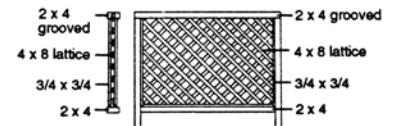
- 2 x 2 in. Balusters, 2 x 4 in. Top and bottom rail



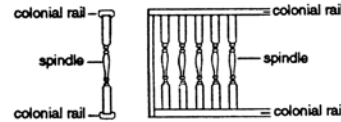
- 2 x 2 in. Balusters, 2 x 6 in. Top rail



- 2 x 4 in. Grooved top rail, 2 x 4 in. Bottom rail, regular 4 ft high lattice



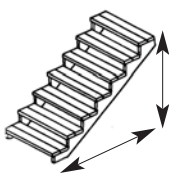
- 2 x 2 in. Colonial spindles, Colonial top/bottom rail



### Staircase style

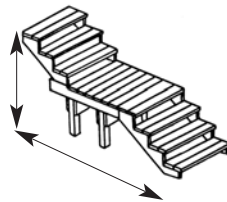
- Straight**

Height \_\_\_\_\_  
Width \_\_\_\_\_  
No. of steps \_\_\_\_\_



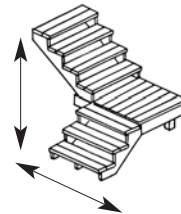
- Straight off landing**

Height \_\_\_\_\_  
Width \_\_\_\_\_  
No. of steps \_\_\_\_\_



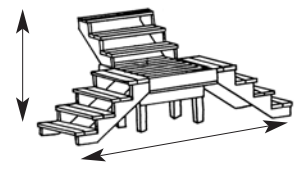
- Right or left landing**

Height \_\_\_\_\_  
Width \_\_\_\_\_  
No. of steps \_\_\_\_\_



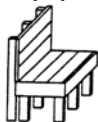
- Both directions off landing**

Height \_\_\_\_\_  
Width \_\_\_\_\_  
No. of steps \_\_\_\_\_



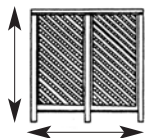
### Accessories

- Bench(es)**



- Privacy screen**

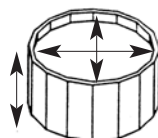
Height \_\_\_\_\_  
Width \_\_\_\_\_



- Hot tub or spa**

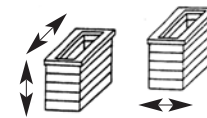
- Round  
 Square  
 On top  
 Built-in

Height \_\_\_\_\_  
Width \_\_\_\_\_  
Depth \_\_\_\_\_



- Planters or openings**

Height \_\_\_\_\_  
Depth \_\_\_\_\_  
Width \_\_\_\_\_



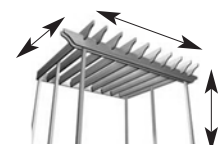
*Note: the opening cannot be closer than 24 in. to the edge of any level or structure*

- Table(s)**



- Pergolas**

Height \_\_\_\_\_  
Width \_\_\_\_\_  
Depth \_\_\_\_\_

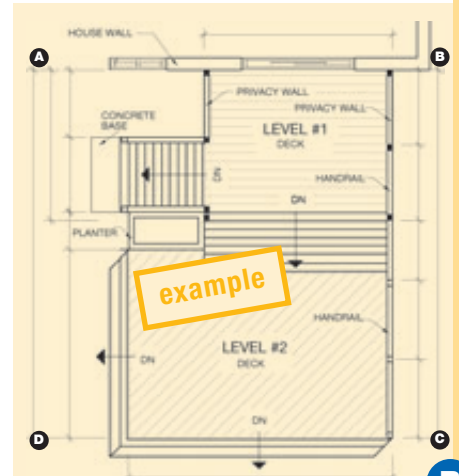


## Draw the plan view

# 3

- ▶ Accurately measure the side(s) of your home where the deck will be built.
- ▶ Measure and indicate all door locations, stairs as well as the placement of existing obstructions such as chimneys and trees.
- ▶ Indicate the main wall, the portion attached to the house and the orientation of planking.
- ▶ Note any modifications to the main deck such as clipped or rounded corners, notches and their sizes.

Scale: 1 square = 1 foot



A
main wall of the house
B

D

Table

Table

Lounge chair

Coffee table

Hot tub

Hot tub

C

Table

Table

Chair

Foot stool

BBQ

\*  
\* End table or planter box

Planter box

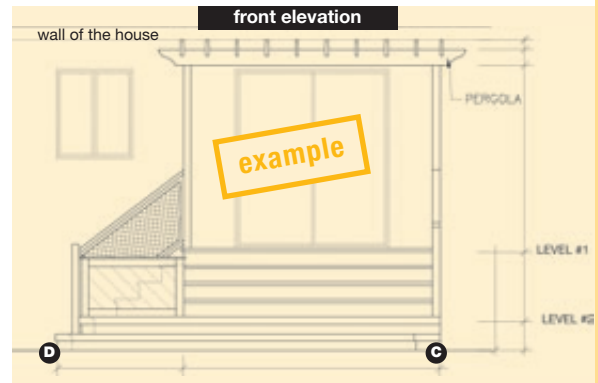
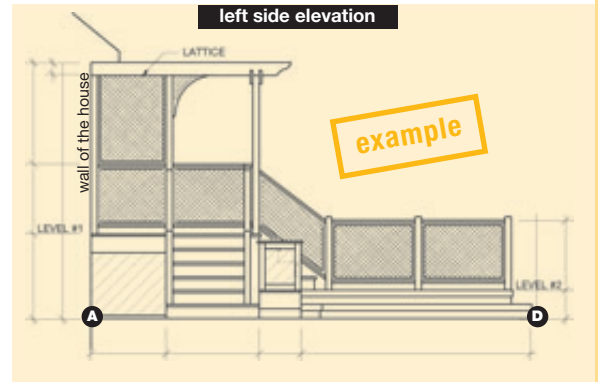
## Draw the elevation plan

# 4

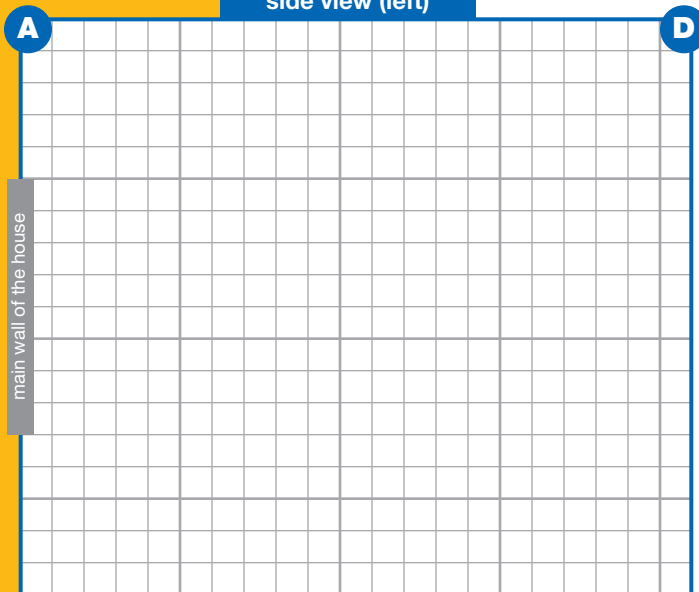
If your deck has more than one level, be sure to include the following for each level:

- ▶ Where the new level attaches to the main (or other) level;
- ▶ All dimensions of the outside edges of the new level(s);
- ▶ The width of stairs or ramps up or down to new level.

Scale: 1 square = 1 foot



side view (left)

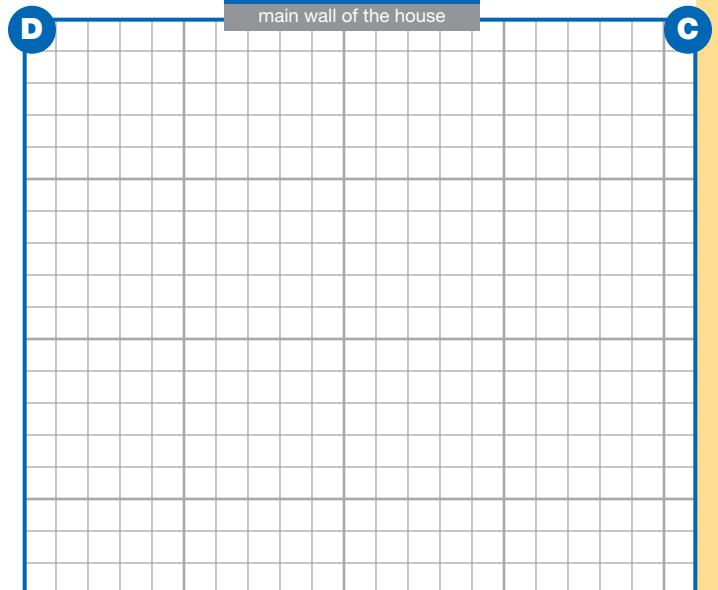


side view (right)



front view

main wall of the house



# Calculate your budget

# 5

**Lumber** listed here (except the mouldings) come in different lengths (8-ft , 10-ft, 12-ft, 14-ft and 16-ft). The size of your deck will determined the length to use.

## Tools

	\$	RONA Code
<input type="checkbox"/> Carpenter's level		
<input type="checkbox"/> Chalk line		
<input type="checkbox"/> Circular saw		
<input type="checkbox"/> Drill bits		
<input type="checkbox"/> Electric drill		
<input type="checkbox"/> Gardener's hoe		
<input type="checkbox"/> Hammer		
<input type="checkbox"/> Line level		
<input type="checkbox"/> Measuring tape		
<input type="checkbox"/> Percussion drill for masonry walls		
<input type="checkbox"/> Shovel		
<input type="checkbox"/> Square		
<input type="checkbox"/> Wood stakes		

## Foundation

	Unit \$	Quantity	\$ total	RONA Code
<b>Pillar</b>				
<input type="checkbox"/> 10-in. Sonotube				
<input type="checkbox"/> Concrete 3000 # (20 Mpa) x 3/4 in.				
<b>Ledger board</b>				
<input type="checkbox"/> 1/2 in. x 8 1/2 in. Anchor bolts				
<input type="checkbox"/> Joist hanger				
<input type="checkbox"/> Steel angle anchorage				

## Floor

<b>Beam</b>	<input type="checkbox"/> 2 x 10 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 10 x 14-ft Treated				
<b>Joist</b>	<input type="checkbox"/> 2 x 10 x 8-ft Treated lumber				
	<input type="checkbox"/> 2 x 10 x 12-ft ber				
	<input type="checkbox"/> 2 x 10-ft Single joist hanger				
<b>Low wall</b>	<input type="checkbox"/> 2 x 4 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 4 x 12-ft Treated lumber				
<b>Header</b>	<input type="checkbox"/> 2 x 10 x 10-ft Treated lumber				
<b>Decking</b>	<input type="checkbox"/> 1 1/4 x 6 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 4 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 6 x 10-ft Treated lumber				

## Railing

<b>Post</b>	<input type="checkbox"/> 4 x 4 x 8-ft Treated lumber				
	<input type="checkbox"/> 4 x 4 x 12-ft Treated lumber				
<b>Handrail</b>	<input type="checkbox"/> 2 x 4 x 8-ft Treated lumber				
	<input type="checkbox"/> 2 x 4 x 12-ft Treated lumber				
<b>Bottom rail</b>	<input type="checkbox"/> 2 x 4 x 8-ft Treated lumber				
	<input type="checkbox"/> 2 x 4 x 12-ft Treated lumber				
<b>Finishing</b>	<input type="checkbox"/> 48 in. x 96 in. Treated lumber lattice				
	<input type="checkbox"/> 8-ft "U" shaped lattice moulding				

## Finishing (low deck)

<b>Structure</b>	<input type="checkbox"/> 2 x 4 x 8-ft Treated lumber				
	<input type="checkbox"/> 2 x 4 x 10-ft Treated lumber				
<b>Finishing</b>	<input type="checkbox"/> 1 x 6 x 5-ft Treated lumber				

# Calculate your budget (cont'd)

# 6

## Staircase

		Unit \$	Quantity	\$ total	RONA Code
<b>Structure</b>	<input type="checkbox"/> 2 x 8 x 8-ft Treated lumber				
	<input type="checkbox"/> 2 x 8 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 8 x 14-ft Treated lumber				
<b>Joist</b>	<input type="checkbox"/> 2 x 8-ft Single joist hanger				
<b>Stringers</b>	<input type="checkbox"/> 2 x 10 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 12 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 10 x 12-ft Treated lumber				
<b>Treads</b>	<input type="checkbox"/> 1 1/4 x 6 x 14-ft Treated lumber				
	<input type="checkbox"/> 1 1/4 x 6 x 16-ft Treated lumber				
	<input type="checkbox"/> 2 x 6 x 8-ft Treated lumber				
	<input type="checkbox"/> 2 x 4 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 6 x 10-ft Treated lumber				
<b>Riser</b>	<input type="checkbox"/> 2 x 8 x 8-ft Treated lumber				
	<input type="checkbox"/> 2 x 8 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 8 x 12-ft Treated lumber				
<b>Post</b>	<input type="checkbox"/> 4 x 4 x 8-ft Treated lumber				
<b>Handrail</b>	<input type="checkbox"/> 2 x 4 x 12-ft Treated lumber				
<b>Bottom rail</b>	<input type="checkbox"/> 2 x 4 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 4 x 12-ft Treated lumber				
<b>Finishing</b>	<input type="checkbox"/> 1 1/4 x 4 x 8-ft Treated lumber				
	<input type="checkbox"/> 1 1/4 x 4 x 12-ft Treated lumber				
	<input type="checkbox"/> 48 in. x 96 in. Treated lumber lattice				
	<input type="checkbox"/> 8-ft "U" shaped lattice moulding				

## Pergola and planter

<b>Roof joist</b>	<input type="checkbox"/> 2 x 8 x 10-ft Treated lumber				
	<input type="checkbox"/> 2 x 8 x 12-ft Treated lumber				
	<input type="checkbox"/> 2 x 8-ft Single joist hanger				
<b>Base</b>	<input type="checkbox"/> 2 x 4 x 12-ft Treated lumber				
<b>Corner</b>	<input type="checkbox"/> 2 x 4 x 10-ft Treated lumber				
<b>Interior</b>	<input type="checkbox"/> 1/2 in. Std spruce plywood				
<b>Finishing</b>	<input type="checkbox"/> 1 1/4 x 4 x 8-ft Treated lumber				
	<input type="checkbox"/> 2 x 4 x 10-ft Treated lumber				
	<input type="checkbox"/> 1 x 6 x 5-ft Treated lumber				

## Hardware

<b>Structure</b>	<input type="checkbox"/> Wall anchorage				
	<input type="checkbox"/> 3/8 in. X 2 in. Galvanized lag screws				
	<input type="checkbox"/> 3/8 in. X 2 1/2 in. Galvanized lag screws				
	<input type="checkbox"/> 3/8-in. Galvanized washer				
	<input type="checkbox"/> 3-in. Ext. Wood screws				
	<input type="checkbox"/> 3 1/2-in. Ardox galvanized nails				
<b>Joist</b>	<input type="checkbox"/> 3/8 in. X 2 1/2 in. Galvanized lag screws				
<b>Pergola</b>	<input type="checkbox"/> 3/8 in. X 2 in. Galvanized lag screws				
	<input type="checkbox"/> 3/8-in. Galvanized washer				
<b>Decking</b>	<input type="checkbox"/> 2 1/2-in. Ext. Wood screws				
<b>Hangers</b>	<input type="checkbox"/> 1-in. Galvanized screws				
<b>Finishing</b>	<input type="checkbox"/> 2-in. Ext. Wood screws				

**TOTAL** \_\_\_\_\_

