# Measurements

# Instructions for mixing cement



Concrete mixing follows a 1:2:3 mix:1 part Portland cement, 2 parts sand, and 3 parts aggregate. However, should you desire exact measurements, use the following amounts.

### Concrete Mixing Instructions (Imperial)

### Ingredients:

- One 94 pound bag of Portland cement
- 15 gallons of sand
- 22 gallons of gravel

Mix the dry ingredients. Then add water in small amounts. One bag will produce about six square yards of cement. The average layer thickness is 4 inches. That's 1/3 of a foot.

### Concrete Mixing Instructions (Metric)

### Ingredients:

- One 43 kilogram bag of Portland cement
- 57 liters of sand
- 83 liters of gravel

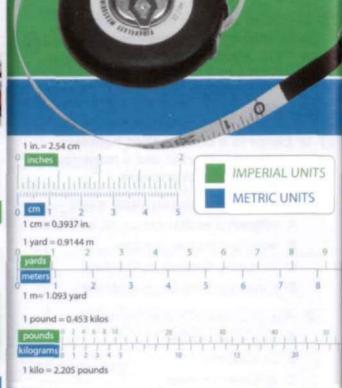
Mix the dry ingredients. Then add water in small amounts. One bag will produce about five square meters of cement. The average layer thickness is 10 centimeters.

### Get ready!

- Before you read the passage, talk about these questions.
  - 1 What are some imperial units of measurements?
  - 2 What are some metric units of measurement?

# Reading

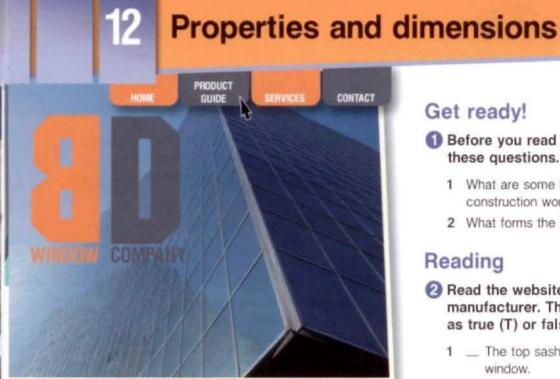
- Read the instructions for mixing cement. Then, mark the statements as true (T) or false (F).
  - 1 \_ Forty pounds of cement is equal to 60 kilos.
  - 2 \_\_ Water should be added after the sand and cement are mixed.
  - 3 \_\_ One bag of cement will produce a layer with thickness of 5 inches or 2 centimeters.



### Vocabulary

Match the words (1-6) with the definitions (A-F).

- A a metric unit of mass
- B a metric unit of volume
- C an imperial unit of length
- D an imperial unit of mass
- E a metric unit of length
- F an imperial unit of volume
- 4 Read the sentence and choose the correct word.
  - The yard and the gallon are metric / imperial units of measurement.
  - 2 Lay out ten yards / centimeters of cement between the building and the street.
  - 3 The board is only five kilograms / feet long.
  - 4 The bolt is about eight centimeters / gallons long.
  - 5 The meter and kilogram are metric / imperial units of measurement.





a height of 90 cm. The bottom sash opens. The top sash is fixed.

Storm Windows

These are a greater weight and provide extra strength to resist wind and other weather. They have a 3 cm thickness. We start at a minimum window length of 80 cm.

# Casement Windows

These windows also have a sash. It swings inward or outward. They should be installed on a sill with a minimum length of 8 cm.

fit French doors. They do require a minimum jamb width of 8 cm. The depth at the bottom of the door should be 1 cm.



# Get ready!

- Before you read the passage, talk about these questions.
  - 1 What are some important dimensions in construction work?
  - 2 What forms the base of a window?

# Reading

- Read the website from a window manufacturer. Then, mark the statements as true (T) or false (F).
  - 1 \_\_ The top sash opens in a standard sash window.
  - 2 \_ Casement window sills require an eight centimeter jamb.
  - 3 \_\_ French doors should have a jamb at least 8 cm wide.

### Vocabulary

- 8 Match the words (1-5) with the definitions (A-E).
  - 1 \_ weight 3 \_ length 5 \_ width
  - 4 \_ height 2 \_ depth
  - A the measurement of how long something is
  - B the measurement of how heavy something is
  - C the measurement of how wide something is
  - D the measurement of how deep something is
  - E the measurement of how tall something is
- Fill in the blanks with the correct words from the word bank.

WOrd BANK	
	thickness sill strength dimensions jamb
1	Steel has much more than wood.
2	Don't place that bowl on the window or it will fall off.
3	What is the height and other of that table?
4	The window glass should have a of at least 3cm to keep out cold winds.
5	This door will not fit inside its