## PART II PURCHASING, RECEIVING, RIPENING AND STORAGE

## **Purchasing and Receiving Considerations**

Florida tomatoes are packed in 10, 20 and 25-pound boxes, but the 25-pound box is by far the most common size ordered in foodservice. The quantity of tomatoes found in a box will vary depending on the size of the tomatoes. Upon arrival at your establishment, mark the date on the carton. Be sure to rotate stock, first in, first out, or FIFO. You should discuss with your purveyor the stage or ripeness the tomatoes will arrive, and how they will be held prior to delivery. For proper ripening, fresh tomatoes should never be held at a temperature below 55° F. If possible, upon delivery, check the pulp temperature of samples to verify transport temperatures were above 55° F. A 25-pound box of tomatoes may contain the following:

•	5x6 (formerly extra large tomatoes)	about 38-62 tomatoes
---	-------------------------------------	----------------------

• 6x6 (formerly large tomatoes)

• 6x7 (formerly medium tomatoes)

about 62-80 tomatoes about 87-115 tomatoes

Tomatoes can also be ordered "Place Pack" which is 18 to 20-pound boxes in which the tomatoes are hand packed in rows.

## Size & Yield Tips

Use the following size and yield approximations to assist in ordering tomatoes.

- 1 large tomato weighs about 8 ounces
- 1 medium tomato weighs about 5 to 6 ounces
- 1 pound of tomatoes yields about:
  - 2 to 2-1/2 cups chopped
  - 3 cups wedged or sliced
  - 1-1/2 cups pureed

# **Quality Standards**

Each field-grown tomato shipped out of Florida is regulated by a Federal Marketing Order that controls grade, size, quality and maturity. The standards are the toughest in the world and ensure that Florida tomatoes are the best you can buy. Further, they're grown under stringent government food safety regulations established by the Environmental Protection Agency and the US Food and Drug Administration and enforced by the Florida Department of Agriculture and Consumer Services.

# **Receiving and Ripening**

When you receive Florida field-grown tomatoes do not refrigerate them. This storage rule holds true whether your tomatoes arrive from the supplier already ripened and ready for use, or you plan on additional ripening at your operation.

A tomato whose temperature drops below 54.5° F (12.5° C) will not finish ripening as cold halts the ripening process. Since cold also kills the flavor of tomatoes, even when

the tomatoes are fully ripe, keep them out of cold storage. If you must keep tomatoes in a cooler, wrap them in a thermal blanket and place them near the door. Tomatoes are best held in a dry storage area (see below for ideal conditions for a non-refrigerated, dry storage area appropriate for tomatoes), but can also ripen well in any dry, room temperature area, such as under or above work tables or on a baker's rack, because they can be spread out on trays in a single layer and easily checked for progress. Determining how long to ripen tomatoes depends on the condition that they arrived in your kitchen. Typically, a day or two may be enough, and usually no more than five. A good rule of thumb is to have some on hand at different stages of ripeness, so there is a steady supply when needed.

Always store your tomatoes stem end up. The stem end, where it was separated from the vine, is the most delicate part of the tomato. Florida tomatoes are shipped without their stems, to protect the fruit. Leaving tomatoes on their shoulders, even for a few days, is enough to bruise them, and once bruises appear, spoilage will eventually follow.

To prevent being crushed during shipping, Florida tomatoes often arrive at the pink (see below) stage and will likely require some additional ripening to bring out their full red and juicy nature. Just like any other fruit (think green bananas) they must be ripe to be fully enjoyed. You can either ripen Florida tomatoes in your establishment or work with your vendor who can provide you with product that is fully ripened and ready to use. You can expect to pay a premium for fully ripe tomatoes, and the cost must be balanced against space and time considerations. In order to better understand the ripening process, the six ripening stages, from green to fully ripe, are described below:

**Stage 1** *Green*: The tomato surface is completely green. The shade of green may vary from very light to dark. This is the ideal stage for preparing Fried Green Tomatoes, a southern favorite that involves coating seasoned, sliced tomatoes with corn meal, and shallow or pan frying. Tomatoes in this stage must be specified when ordering.

**Stage 2** *Breakers*: There is a definite break of color from green to yellow, pink or red on 10% or less of the tomato surface. Tomatoes are typically shipped at this or the following stage.

**Stage 3** *Turning*: Yellow, pink and/or red color shows on over 10%, but no more than 30% of the tomato surface.

Depending on your purveyor, you may receive fresh, field-grown tomatoes at any of the following stages. With proper handling (never falling below 55° F) and timely usage, you will maximize flavor in every use.

**Stage 4** *Pink*: Pink or red color shows on over 30%, but no more than 60% of the tomato surface. When receiving tomatoes at this stage, hold in dry storage, away from onions, and monitor daily.





**Stage 5** *Light Red*: Pinkish-red or red color shows on over 60%, but red color does not cover more than 90% of the tomato surface. Hold in dry storage, away from onions, and sort to pull out any tomatoes in stage 6. To speed ripening, trap ethylene gas released by tomatoes (see next section). Perfect for QSR tomato slicers.

**Stage 6** *Red*: Red color shows on over 90% of the tomato surface. Perfect for slices and wedges, and ready to serve.

### Fresh Fruit and Ethylene Gas

Virtually all fresh fruit, including tomatoes, produces a natural byproduct of the ripening process known as ethylene gas. Ethylene gas can be utilized to your advantage to hasten ripening. To speed ripening of fresh tomatoes at any stage, hold in a contained environment that traps the air around the tomatoes. For example, cover box holes with tape or place tomatoes in paper bags crimped at the top to seal in the air. Hold tomatoes in a warm area to increase ethylene activity. Add other fruits that release ethylene, such as bananas, avocados and other tree fruit to hasten ripening. Even simply covering a layer of tomatoes on a tray with towels can utilize the ethylene effect. It is important to note that some produce items, particularly leafy greens such as lettuces, are sensitive to ethylene gas and will turn brown if they come in close contact with it over a period of time. It is good practice to keep ethylene sensitive produce away from those items that release ethylene.

#### Ideal Conditions for the Foodservice Dry Storage Area

The dry storage area designated in a commercial kitchen is the place where nonrefrigerated food items should be stored. By maintaining these ideal dry storage conditions, the quality of the food product will be maintained and preserved.

- Keep storerooms cool, dry and well ventilated. Moisture and heat are the biggest dangers to food items. The temperature of the storeroom should be between 55°F and 70°F (~ 12°C and 21°C). Keep relative humidity at 50% to 60%, if possible. A device which is used to measure humidity in a foodservice setting is called a *hygrometer*.
- Store food items away from walls and at least six inches off the floor.
- Keep food items out of direct sunlight.
- Keep the area clean and well maintained.
- Make sure that the area is well ventilated. This will help keep temperature and humidity constant throughout.
- Ideal temperature for holding Florida tomatoes is 55°F to 60°F (~ 12°C to 15°C) and 85% to 95% relative humidity.

