

# Controlled Atmosphere Packaging for Fresh Produce.

*Do you need help selecting the right packaging materials for your fresh produce?*

*Our controlled atmosphere packaging (CAP) films are designed to provide the required oxygen transmission rates (OTRs) for fresh produce like broccoli, cauliflower, stone fruit, herbs, melons and fresh-cut items.*



Microperforation



Mechanical Punch

**The Problem** - Polymer blends, coextrusions, and laminate films with OTRs of 80 to 500 cc/100 in<sup>2</sup>-day-atm are being used for various weights of low respiring produce items like lettuce. These OTRs, however, are much too low to preserve the fresh quality of high respiring produce like broccoli, asparagus, and fresh-cut items. In addition, existing film OTRs for bulk quantities (5 lbs or more) of low respiring produce are not high enough to prevent sensory quality changes during storage.

**Our Solution** - The key element of our CAP films is a unique process that produces in-register microperforations. Unlike other microperforated films, we register the perforations in a small, identifiable area so the processor can easily verify their presence. In addition, our microperforations are positioned to avoid occlusion of the breathable areas during pack-out, storage and transport.

Each of our CAP films for fresh produce is *customised* by varying microperforation size and number, taking into consideration respiration rate, package weight, volume, and anticipated distribution temperatures. Proper selection and placement of microperforations encourages development of an optimum atmosphere inside the package, controlling oxygen, carbon dioxide, and moisture levels *to extend product life*.

We take the responsibility and burden of mechanically perforating packaging films out of the hands of the processor. Compared to mechanical methods of making holes, our process produces small, uniform microperforations without contacting film or product surfaces with metal parts. Therefore, the risk of cross-contamination of produce by non-sterile hole punches is eliminated.

## Advantages of our CAP Films

- Accommodate a wide range of fresh produce items at any desired weight.
- Adaptable to all flexible films, and all packaging modes: VFF&S, HFF&S, lidding, pre-made bags.
- Convenient, pre-perforated, & ready-to-use.
- Properly selected films extend product quality and shelf life.
- Cost competitive compared to other controlled/modified atmosphere packaging.



**Experienced Professional Help** - Our technical staff has 16 years experience in the fresh produce industry. We were designing packaging films for the industry before breathable films were recognized as a necessity. Our strengths come from in-depth knowledge of the factors affecting produce quality, including fresh-cut processing. We couple that knowledge with our expertise in identifying packaging film requirements and manufacturing those films for our customers' unique product characteristics.

We provide thorough technical assistance to our customers. Our hands-on approach to problem solving is based on actual industry practices. So when we assist you with package selection, you know that all aspects of produce processing, storage, and distribution have been considered.

*Let us help you move rapidly from product concept to commercialization.  
Contact us for immediate assistance with your packaging needs.*

### Technical Sales/Service



**PPC Industries, Inc.**

DESIGNERS AND MANUFACTURERS  
OF FLEXIBLE PACKAGING

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