

## CASE STUDY

# Bee Sweet Mandarin Line

**ONEDEK®**  
INSULATED ROOF DECK



**Your vision. Our purpose.**

### OneDek® Insulated Roof Deck - Making the Switch

Bee Sweet Citrus, a prominent citrus fruit grower, needed a new facility to expand its operations in Northern California. For Bee Sweet Citrus, control of temperature and humidity is paramount to product quality and longevity. Additionally, the construction schedule, envelope performance, and operational costs were major design considerations for the project team. Overall, the 212,000 square-foot facility posed a unique challenge with a requirement of three distinct climate zones.

Gerald A Mele & Associates, the firm designing the project, considered a traditional low slope assembly, and partnered with general contractor Beckenhauer Construction, Inc., who specializes in food processing construction, and PanelClad, a premier vertically integrated design-build steel contractor, to develop

### LOCATION:

Fowler, CA

### PROJECT OWNER:

Bee Sweet Citrus - California

### ARCHITECT

GMA, Gerald A Mele & Associates

### CONTRACTOR

Beckenhauer Construction, Inc.

### INSTALLER:

PanelClad

### PRODUCT DETAILS:

- 212,000 sq. ft.
- 4" OneDek RD1 panels
- 80 mil. fully adhered TPO membrane
- 40-5/12 diaphragm shear fastening



“OneDek leverages IMP technology and capability into low-slope applications.”

- Jared Bradford

## OneDek® Insulated Roof Deck - Making the Switch (Continued)

the right system to handle the varying climate requirements throughout the facility. Different R-values were needed for the refrigerated (processing/storage), ambient (shipping/nonperishable storage) and air conditioned (office/processing). PanelClad proposed OneDek for the project; and after understanding the benefits, the project team agreed.

“OneDek leverages IMP technology and capability into low-slope applications,” said PanelClad president Jared Bradford. “If performance, efficiency, and speed are driving factors on a project I always think OneDek.”

Having an R-value of 7.2 per inch resulted in the use of 4” OneDek panels without additional installation steps, which would have been required with the additional layers of traditional ISO board insulation to meet the R-value requirements for the different climate zones of the facility. Humidity control is also critical for this type of facility and is another strength of the OneDek assembly, as it requires less steps and components reducing potential opportunities for vapor drive.

The structural benefits of going to OneDek reduced the number of structural supports that were required, along with the ability to accommodate mounting a full roof solar array due to the consistency of the system.



“The performance and efficiency of OneDek is unequalled,” Bradford said. “When you have a compressed project schedule like we had on Bee Sweet, we have the ability to panelize OneDek panels on the ground. This allows us to install up to 1,000 square feet of roof panels at a time, reducing installation time and labor. You just can’t do that with traditional systems.”

The switch to a OneDek roof assembly in this facility produced remarkable results. Bee Sweet Citrus experienced more consistent temperature and humidity control, enabling it to store citrus fruits for extended periods without compromising quality. The reduced temperature fluctuations translated into energy savings, as the cooling systems had to work less to maintain the desired conditions.



Scan for the most current product information



**All Weather**  
Insulated Panels

1 (888) 970-AWIP (2947)  
[awipanel.com](http://awipanel.com)  
[sales@awipanel.com](mailto:sales@awipanel.com)



In accordance with ongoing efforts to improve our products and their performance, All Weather Insulated Panels reserves the right to change without notice the specifications contained herein. The contents herein are for general information and illustrative purposes only and are not intended to serve as any type of advice. Every effort is made to ensure the accuracy of the information included in this brochure and it is believed that the information contained herein is accurate and reliable as of the date of this publication. All Weather Insulated Panels does not warrant or represent the accuracy or reliability of any information included in this collateral. Any reliance of any information without consultation with All Weather Insulated Panels or a duly authorized representative shall be at the user's own risk. Copyright 2024 All Weather Insulated Panels — All rights reserved.