FLORIUS
fresh & colourful

STANDARD OPERATING PROCEDURES
FOR BOX IMPORT / TRANSPORT & HANDLING OF FRESH CUT FLOWERS

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BOX TRANSPORT GUIDELINES

QUICK OFFLOAD

OUR FLOWERS ARE PERISHABLES. IT IS HIGHLY SUGGESTED TO COMPLETE OFFLOADING THE FLOWERS WITHIN **30** MINUTES.

TEMPERATURE SENSITIVE

OUR FLOWERS ARE HIGHLY SENSITIVE TO HEAT AND TEMPERATURE CHANGES. AFTER A LONG FLIGHT, ENSURE THAT THE FLOWERS ARE KEPT IN COLD STORAGE.

0-1°C	0-2°C	0-4°C
BEST	GOOD	ACCEPTABLE

MOISTURE SENSITIVE

MOISTURE HASTENS THE BROWNING OF OUR FLOWERS. IT'S BEST TO KEEP OUR FLOWERS IN COOL AND DRY STORAGE AT ALL TIMES. KEEP AWAY FROM SUNLIGHT AND RAIN.

PHYSICAL DAMAGE OFTEN OCCURS DURING FLIGHT AND TRANSPORT OF OUR FLOWERS. FOLLOWING THE GUIDELINES LISTED ABOVE WILL REDUCE THE CHANCES OF OUR BOXES AND FLOWERS BEING DAMAGED.

BOX TYPE & PALLET STACKING GUIDELINES

HALF BOX (HB)

APPROXIMATE WEIGHT:	9 KG
BOXES IN A PALLET:	36 BOXES
MAX LAYERS IN A PALLET:	9 LAYERS (4 HB / LAYER)

QUARTER BOX (QB)

APPROXIMATE WEIGHT:	4.5 KG
BOXES IN A PALLET:	76 BOXES
MAX LAYERS IN A PALLET:	19 LAYERS (4 QB / LAYER)

EIGHT BOX (EB)

APPROXIMATE WEIGHT:	2.25 KG
BOXES IN A PALLET:	152 BOXES
MAX LAYERS IN A PALLET:	19 LAYERS (8 EB / LAYER)

PLEASE FOLLOW THE SUGGESTED BOX STACKING PROCEDURE TO ENSURE THAT NO PHYSICAL DAMAGE / TRAUMA WILL BE DONE TO FLOWERS.

ENSURE ALL UNIT LOAD DEVICES (ULD) ARE INSIDE THE STORAGE FACILITY AND THAT NOTHING IS LEFT OUTSIDE.

BOX HANDLING GUIDELINES

HOLDING THE BOXES HORIZONTALLY LIMITS THE MOVEMENT OF THE FLOWERS INSIDE.

LESS MOVEMENT = LESS DAMAGE

HOLDING THE BOXES VERTICALLY ALLOWS THE FLOWERS TO MOVE MUCH MORE FREQUENTYLY INSIDE THE BOX.

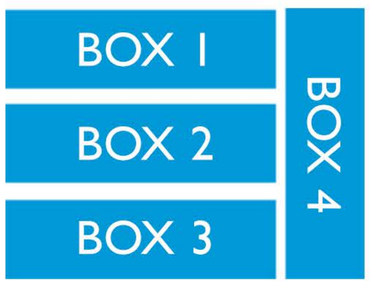
MORE MOVEMENT = MORE DAMAGE

BOX STACKING PROCEDURE

STEP 1

BEGIN BY PLACING THREE (3) ADJACENT BOXES HORIZONTALLY. PLACE ONE (1) BOX VERTICALLY ON ONE SIDE TO FILL THE PALLET COMPLETELY.

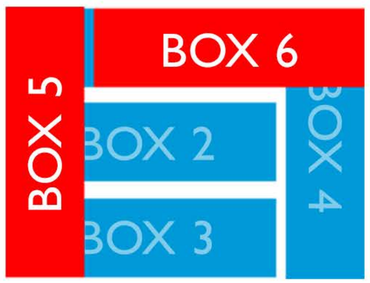
FIGURE 1



STEP 2

BEGIN THE NEXT LAYER BY PLACING ONE (1) VERTICALLY POSITIONED BOX ON THE OPPOSITE END OF THE PALLET. PLACE THREE (3) HORIZONTALLY POSITIONED BOXES AFTERWARDS.

FIGURE 2



PALLET STANDARDS AND GUIDELINES

CHARACTERISTICS OF A GOOD CHIMNEY PALLET

- ✓ STANDS STRONG AND STRAIGHT
- ✓ NO VISIBLE LEANING
- ✓ BOXES ARE NOT DAMAGED

MAXIMUM STACKING LIMIT PER CHIMNEY PALLET

- ✓ 9 LAYERS FOR HALF BOXES (HB) - 36 BOXES
- ✓ 19 LAYERS FOR QUARTER BOXES (QB) - 76 BOXES
- ✓ 19 LAYERS FOR EIGHT BOXES (EB) - 152 BOXES

ADHERING TO THE SUGGESTED STACKING AND PALLET GUIDELINES WILL ENSURE THAT THE BOXES ARE STORED AT AN OPTIMAL CONDITION.

PROPER BOX PALLET

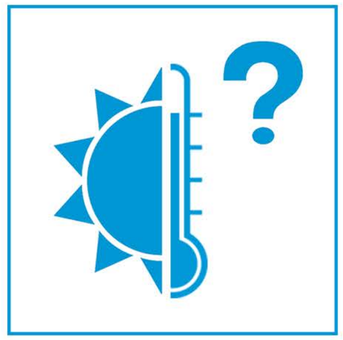
BOX PALLETS IN CHIMNEY STACKING

SIDE-VIEW

FRONT-VIEW

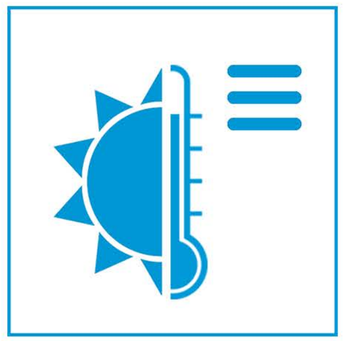
ANGLED-VIEW

ORGANIC HEAT AND CUT FLOWERS



WHAT IS ORGANIC HEAT?

ORGANIC HEAT IS PRODUCED BY ANY LIVING MATTER. ORGANIC HEAT IS DISPERSED DURING RESPIRATION OR TRANSPIRATION.



FAQs ABOUT ORGANIC HEAT

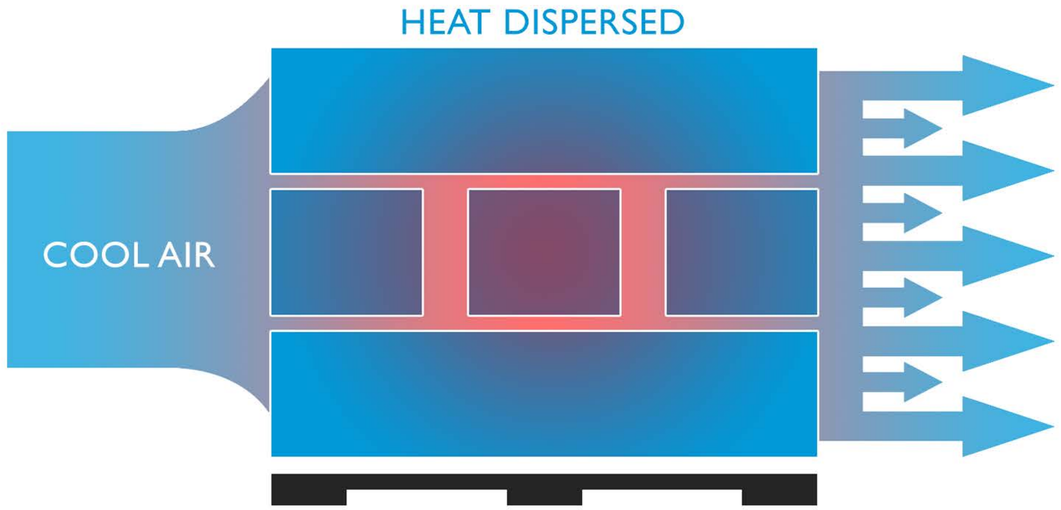
- ORGANIC HEAT INCREASES EXPONENTIALLY; THIS MEANS THAT THE HEAT TEMPERATURE INCREASE DOUBLES THE LONGER THE PRODUCT/S ARE NOT SUBJECTED TO RE-COOLING.

- ORGANIC HEAT IS DIRECTLY RELATED TO VASE LIFE AND QUALITY. TO PUT IT SIMPLY, MORE ORGANIC HEAT EQUALS LESS VASE LIFE.

- ORGANIC HEAT INCREASES THE GERMINATION AND TRANSPIRATION OF CUT FLOWERS. THIS IS WHY IT IS VERY IMPORTANT TO KEEP THE SUGGESTED TEMPERATURE RAGES TO LIMIT ORGANIC PRODUCTION.

0-1°C	0-2°C	0-4°C
BEST	GOOD	ACCEPTABLE

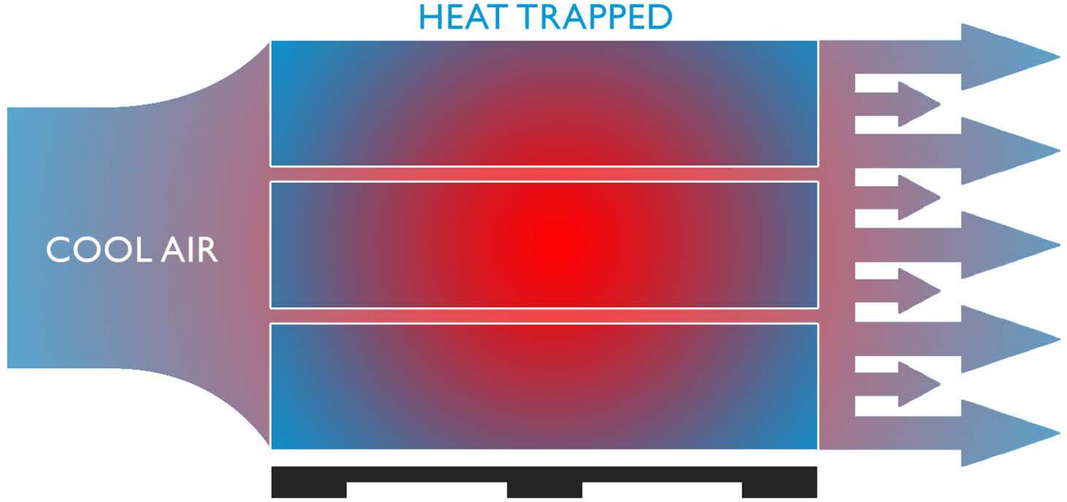
ORGANIC HEATING & THE PRINCIPLE OF CHIMNEY STACKING



CHIMNEY STACKING
(RECOMMENDED)

WITH CHIMNEY STACKING METHOD, IT CAN BE SEEN THAT AIRFLOW IS VERY EFFICIENT. ORGANIC HEAT IS EASILY DISPERSED.

CHIMNEY STACKING GIVES ENOUGH BREATHING ROOM FOR EACH BOX. THIS IS WHY CHIMNEY STACKING IS THE STANDARD STACKING METHOD USED FOR FLOWER BOXES DURING EXPORT AND STORAGE.



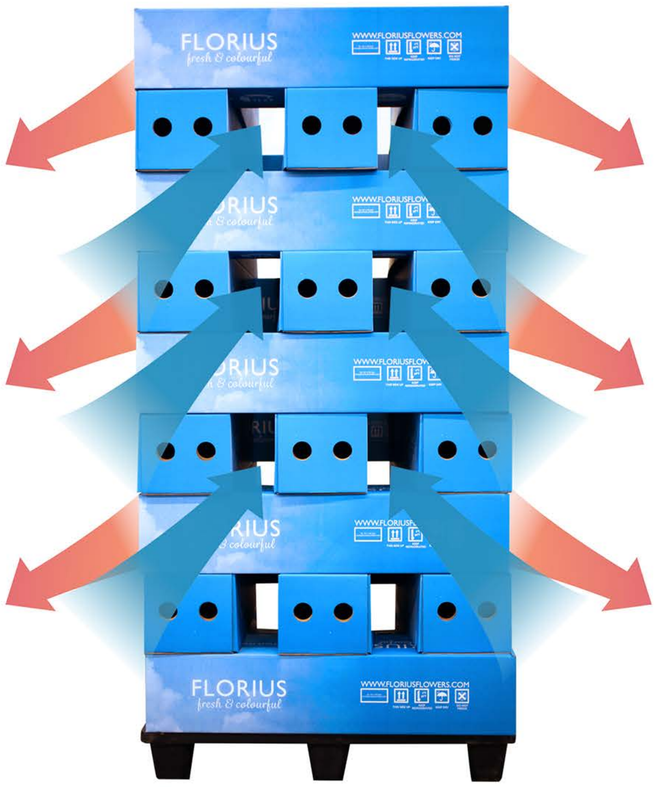
TRADITIONAL STACKING
(NOT RECOMMENDED)

WITH TRADITIONAL STACKING METHODS, AIRFLOW IS VERY LIMITED, THIS IN TURN TRAPS ALL THE BUILT-UP ORGANIC HEAT. THE HIGHEST HEAT CONCENTRATION CAN BE FOUND IN THE MIDDLE OF THE STACK.

IT IS OUR TOP PRIORITY TO MANAGE ORGANIC HEATING DURING EXPORT AND STORAGE. KEEPING THE FLOWERS AT A COOL 0-2°C TEMPERATURE WILL PRESERVE IT'S QUALITY, WHICH IN TURN WILL GIVE THE FLOWERS A LONGER VASE LIFE.

ORGANIC HEATING & PROPER BOX AIRFLOW

CHIMNEY STACKING
(RECOMMENDED)



- ✓ GOOD & EFFECTIVE AIRFLOW
- ✓ ORGANIC HEAT EFFECTIVELY DISPERSED
- ✓ INCREASES THE VASE LIFE OF FLOWERS

TRADITIONAL STACKING
(NOT RECOMMENDED)

- X POOR & INEFFECTIVE AIRFLOW
- X MINIMAL HEAT DISPERSED
- X ORGANIC HEAT IS TRAPPED
- X SIGNIFACANTLY REDUCES THE VASE LIFE OF FLOWERS

STORAGE TEMPERATURE GUIDELINES

SET POINT

0.5°C

BEST

0-1°C / 32-34°F

TEMPERATURE VARIANCE

SET POINT

1°C

GOOD

0-2°C / 32-37°F

TEMPERATURE VARIANCE

SET POINT

2°C

ACCEPTABLE

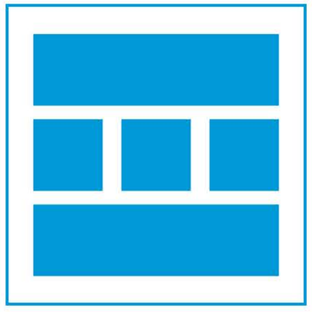
0-4°C / 32-39°F

TEMPERATURE VARIANCE

FAILING TO ADHERE TO THE TEMPERATURE GUIDELINES WILL INCREASE THE GERMINATION AND DEGRADATION OF OUR FLOWERS WHICH RESULTS TO LESSER QUALITY AND SHORTER VASE LIFE.

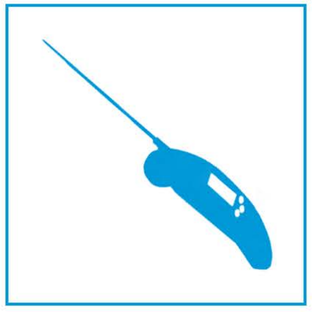
ARRIVAL PROCEDURES AND GUIDELINES

ARRIVAL BY PLANE



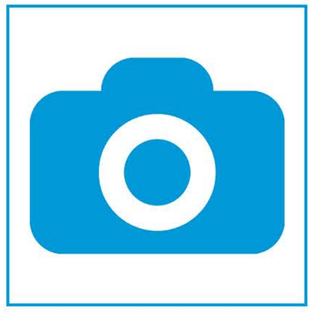
STEP 1

PROPERLY STACK THE BOXES USING THE CHIMNEY METHOD.



STEP 2

BEGIN PROBING THE BOXES TO TAKE THE TEMPERATURE.

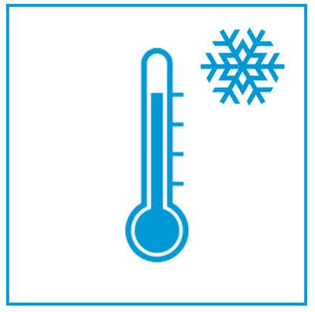


STEP 3

TAKE A QUICK PHOTO OF THE WHOLE BOX PALLET WITH THE THERMOMETER INSERTED.

STEP 4

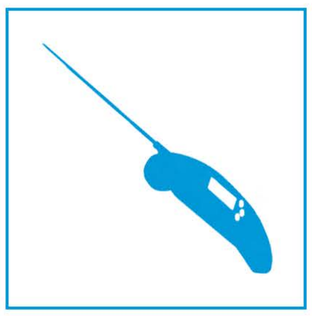
AFTER 5 MINUTES. RECORD THE TEMPERATURE DISPLAYED ON THE THERMOMETER. SEND THE RECORDED TEMPERATURE VIA EMAIL AFTERWARDS.



STEP 5

PLACE THE PALLET IN COLD STORAGE TO REINITIATE THE COOLDOWN PROCESS.

ARRIVAL BY TRUCK



STEP 1

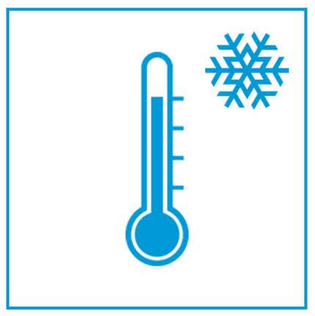
SINCE THE BOXES ARE ALREADY STACKED UPON ARRIVAL THE TEMPERATURE PROBING CAN BE INITIATED.

STEP 2

TAKE A QUICK PHOTO OF THE WHOLE BOX PALLET WITH THE THERMOMETER INSERTED.

STEP 3

AFTER 5 MINUTES. RECORD THE TEMPERATURE DISPLAYED ON THE THERMOMETER. SEND THE RECORDED TEMPERATURE VIA EMAIL AFTERWARDS.



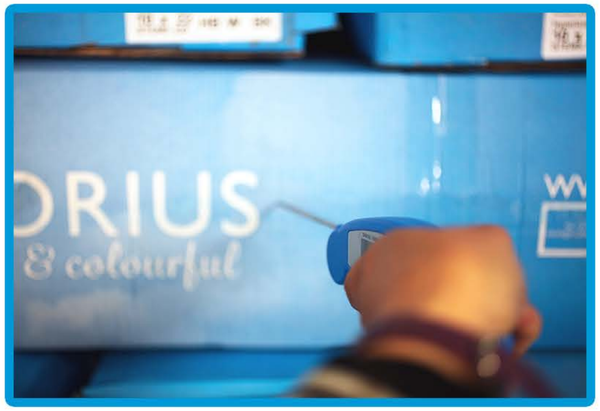
STEP 4

PLACE THE PALLET IN COLD STORAGE TO REINITIATE THE COOLDOWN PROCESS.

IT IS VERY IMPORTANT TO KEEP THE COLD-CHAIN PROCESS INTACT DURING THE ENTIRE ARRIVAL PROCESS. KEEPING THE FLOWERS AT THE RECOMMENDED TEMPERATURE RANGE MUST BE THE TOP PRIORITY AT ALL TIMES.

TEMPERATURE PROBING GUIDELINES

1. PREPARE ALL NECESSARY TOOLS THAT WILL BE USED DURING THE PROBING PROCESS.



2. NEXT, SLOWLY INSERT / PROBE THE THERMOMETER INTO THE FLOWER BOX.

3. AFTER PROBING, WAIT FOR 5 MINUTES TO ACQUIRE A PROPER TEMPERATURE READING.

4. AFTER 5 MINUTES, CHECK AND RECORD THE TEMPERATURE THAT'S DISPLAYED ON THE THERMOMETER.

5. KEEP THE METAL PART OF THE THERMOMETER WITHIN THE BOX; BE CAREFUL NOT TO PROBE TOO MUCH WHERE IT GOES THROUGH THE BOX.

OUR FLOWER BOXES COME IN 3 SIZES (HB, QB, EB). ENSURE THAT THE METAL PART OF THE THERMOMETER IS WITHIN THE BOX. IF YOUR THERMOMETER GOES THROUGH-AND-THROUGH THE BOXES, THE ACQUIRED TEMPERATURE MEASUREMENT WILL BE INCORRECT.

This document is prepared and made by Florius Flowers as part of its Quality Assurance Protocols. This document contains details about proper transport, handling, and storage of their packed boxes.

This document is valid for a period of one year. After one year, this document will be reissued without change or revised by Florius Flowers.

Questions regarding this document or other quality related concerns should be addressed directly to the Quality Staff at:

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