

REPORT ON
UPDATION OF TECHNICAL SPECIFICATIONS
OF PACKAGING FOR FRESH FRUITS
&VEGETABLES FOR EXPORT
PART - I

FOR



AGRICULTURAL & PROCESSED FOOD PRODUCTS
EXPORT DEVELOPMENT AUTHORITY (APEDA)
NEW DELHI

STUDY CARRIED OUT BY



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1. INTRODUCTION

1. INTRODUCTION

In today's competitive world, packaging plays a crucial role in creating value added, consumer friendly and self-selling packs. In the global scenario governed by WTO, it is imperative for us to upgrade the packaging standards at par with the world's best. Development of optimum technical specifications of packaging through innovative, cost effective, eco friendly package design have become the vital requirement for the global market.

In order to meet this requirement, the Indian Institute of Packaging, an autonomous body under the Ministry of Commerce & Industry, Govt. of India has carried out R&D projects on the Development of Optimum Package Design for the packaging of fresh fruits and vegetables and also formulated the technical specifications of packaging in the year 1999-2000. This particular study was carried out on behalf of Agricultural & Processed Food Products Export Development Authority (APEDA).

However, over a period of time, there has been enormous Research and Development work carried out globally for the development of paper based packages mainly corrugated fiber board boxes with appropriate design as consumer as well as bulk package for fresh fruits and vegetables. In addition, it has been experienced that globally, the requirement of unit pack with the number of pieces of fresh fruits per

package are different for different fruits. Similarly, the weight of fresh vegetables per unit package varies from country to country. Due to this fact, the market trend for bulk packages of fresh fruits and vegetables have also been changed.

Considering this background, an urgent need is arisen for the updation of the existing technical specification of packaging for fresh fruits and vegetables for export in compliance with the international market requirement and also to satisfy the global consumer.

In this context, the Agricultural & Processed Food Products Export Development Authority (APEDA) has requested the Indian Institute of Packaging to carry out R&D work to assess the existing packaging system being followed by the different overseas countries. These information can be obtained through interactions with the leading Indian exporters of fresh fruits and vegetables. Based on their inputs, the Institute is required to develop an optimum design of corrugated fiber board boxes as unit pack for different variety of fresh fruits and vegetables and also to develop the bulk packages for the same.

In addition, the R&D work should also cover the formulation of updated technical specifications of packaging by considering the different scientific parameters for various functional properties of corrugated fiber board boxes in order to meet the international norms. Accordingly, Indian Institute of Packaging has taken up these research and

development work for the development of suitable package design and also to formulate the technical specifications of packaging for unit packs as well as bulk packs for fresh fruits and vegetables.

The Indian Institute of Packaging is highly thankful to APEDA for awarding this R&D project for the benefit of exporters and also to boost the Export market.

2. AREAS OF WORK TO BE COVERED

2. AREAS OF WORK

The project is undertaken by covering the following areas of work :

- 2.1 Desk research on the existing technical specification of Packaging of fresh fruits and vegetables being used .
- 2.2 Collection of information on the packaging system being adopted by the exporters for the export of fresh fruits and vegetables through interaction with the officials of APEDA and Mumbai based exporters.
- 2.3 Based on the inputs received, a complete review of the technical specification laid down earlier and also to identify the areas for the improvement of Package design of unit package for the packaging of different types of fresh fruits and vegetables.
- 2.4 Development of unit package made of corrugated fiber board boxes for different variety of fresh fruits and vegetables.
- 2.5 Development of bulk package made of corrugated fiber board boxes to meet the export requirement.
- 2.6 To draw the technical specification by updating the existing specifications and prepare the revised technical standards for unit and bulk package of fresh fruits and vegetables.
- 2.7 Submission of draft technical specification to APEDA for their concurrence.
- 2.8 Based on the feedback received from APEDA, the technical specifications will be finalized.

3. PRODUCT COVERAGE

3. PRODUCT COVERAGE :

Considering the export potential, a number of fresh fruits and vegetables were considered for the development of unit pack and bulk pack for those selective fresh fruits and vegetables.

3.1 DEVELOPMENT OF BULK PACKAGE FOR EXPORT

3.1.1 Fresh fruits

The following 6 types of fresh fruits are selected to develop the bulk package :

- Bananas (*Musa paradisiaca*)
- Oranges (*Citrus sinensis*)
- Custard Apple (*Annona reticulate*)
- Pomegranate (*Punica granatum*)
- Grapes (*Vitis vinifera*)
- Mangoes (*Mangifera indica*)
 - Alphonso
 - Kesar
 - Dusheri
 - Banganapalli
 - Chausa

3.1.2 Fresh vegetables

The following 12 types of fresh vegetables are selected to develop the bulk package :

- Green Chilies (*Capsicum annum*)
- Brinjal (Small & Big) (*Solanum melongena*)
- Papadi (*Dolichos lablab*)
- Kantola (*Momordica dioica*)
- Tindola (*Coccinia grandis*)
- Bitter gourd (*Momordica charantia*)
- Okra (*Abelmoschus esculentus*)
- Baby Corn (*Zea mays L*)
- Yam (*Dioscorea alata*)
- Arbi (*Colocasia esculenta*)
- Potatoes (*Solanum tuberasum*)
- Onion (*Allium cepa*)

3.2 DEVELOPMENT OF CONSUMER PACKAGE FOR FRESH VEGETABLES & FRUITS

The following 5 types of fresh vegetables are selected to develop the consumer package

- Snow peas (*Pisum sativum var. saccharatum*)
- Snap Peas (*Pisum sativum var. macrocarpon*)
- Asparagus (*Asparagus officinalis*)

- Cherry Tomatoes (*Solanum lycopersicum* var. *cerasiforme*)
- Grapes (*Vitis vinifera*)

3.3 DEVELOPMENT OF TRANSPORT PACKAGE FOR FRESH VEGETABLES

The transport package are developed for the fresh vegetables, whose consumer package are also developed

- Snow peas (*Pisum sativum* var. *saccharatum*)
- Snap Peas (*Pisum sativum* var. *macrocarpon*)
- Asparagus (*Asparagus officinalis*)
- Cherry Tomatoes (*Solanum lycopersicum* var. *cerasiforme*)
- Grapes (*Vitis vinifera*)

4. PRESENT PACKAGING SYSTEM FOR FRESH FRUITS AND VEGETABLES

4. PRESENT PACKAGING SYSTEM

4.1 ORANGES (*Citrus sinensis*)

Oranges are placed in moulded pulp trays with cavities for individual oranges. Each tray contains about 20/25/30 oranges depending upon the size. Four to five such trays are placed in a corrugated fibreboard box.

4.2 CUSTARD APPLE (*Annona reticulate*)

Custard apples are packed in 3-ply Corrugated Fibre Board boxes of RSC type or EPS (Expanded Polystyrene) boxes. The capacity of the box is 3kg. The fruits are placed in one layer inside the box and depending upon the size the number of fruits vary. The box is closed by application of pressure sensitive tape. The box is closed by means of pressure plastic tape.

4.3 BANANAS (*Musa paradisiacal*)

Bananas are packed in perforated plastic bag and then placed in ventilated corrugated fibre board box. The boxes are transported by sea and the stack height is maintained as 10 box during transportation.

4.4 POMEGRANATE (*Punica granatum*)

Pomegranates are packed in 5ply RSC (regular slotted container) of corrugated fibre board box. The capacity of the box is 5kg. The fruits are placed inside the box. However No. of fruits to be packed

varies depending on the size of the individual fruits. The box is closed by means of pressure sensitive tape.

4.5 GRAPES (*Vitis vinifera*)

Grapes are packed in boxes made of either Corrugated Fibre Board or Expanded Poly Styrene of having capacity of 1 kg., 4.5 kg., 5kg. or 9kg.. Two nos. of 1 kg boxes are combined to make a Jotta of 2 kg. boxes. These boxes are used for exports to Gulf countries. However for European market, grapes are exported in plastic units of 500gm. capacity, Ten nos. of punnets are packed into tuck-in-type box. Expanded Poly Styrene (EPS) boxes of having capacities 5 kg and 9 kg are also used for export by sea.

4.6 Mangoes (*Mangifera indica*)

Different varieties of Mangoes like Alphonso, Kesar, Banganapalli, Dusheri and Chausa are packed in 3-Ply or 5- Ply Corrugated Fibre Board boxes with ventilation holes. Paper cuttings are also used as a cushioning material inside the box and the quantity will vary depending upon the size and the capacity of the boxes. Number of pieces per box could be ranging from 6 nos, 9 nos, 12 nos, 15 nos. and 18 nos. Generally the boxes made with style (0306) i.e. lidded type or Regular Slotted Container (RSC) of style (0201) are used. Mode of transportation is either by air or sea depending on the destination.

4.7 VEGETABLES

Vegetables like green chillies, brinjal, papdi, kantola, tindola, bitter ground are packed in 3-Ply or 5- Ply Corrugated Fibre Board boxes with ventilation holes depending upon the capacity. The capacity of box varies and ranging from 5 kg, 7 kg & 10 kg. Generally the box is lidded type (0306) but sometimes vegetables are also packed in Regular Slotted Container (RSC) type of having style (0201). In case of green chillies, the different varieties of chillies like G-4, Kiran and Jawla are exported, similarly different varieties of brinjal like black beauty, pink rawaya and Tindola are packed in plastic woven sacks of having capacity 5kg. to 7 kg..

Vegetables like arbi are packed in gunny bags having capacity of 5kg and yam are packed in capacities of 10kg & 15kg.

The different varieties of potatoes like Kuffri Bahar, Kuffri Locker and Kuffri Badshah are exported. The potatoes are packed in Hessian bags (Jute bags) of having capacity of 25 kg. The bags used are generally hand stitched and the final stitching is done in such a manner that there is no space and scope for the movement of the product within the pack. Two corners of the open end of the bag when

stitched are used as handles while loading and by application of pressure sensitive tape and reinforced with plastic shop unloading.

The potatoes are exported by sea as container cargo in both general purposes as well as refrigerated containers.

The export of vegetables like snow peas, snap peas, asparagus and cherry tomatoes, is very negligible. Due to this fact the current packages are not made available for the study.

The Corrugated Fibre Board boxes, currently used for packaging of fresh fruits and vegetables have been tested in the laboratory for different parameters and the results are given in Annexure-I. Photographs of the different size and shapes of the boxes are also given in APPENDIX-1

5. ANALYSIS OF EXISTING TECHNICAL SPECIFICATION OF BULK PACKAGE

5. QUALITY EVALUATION OF EXISTING TECHNICAL SPECIFICATION OF BULK PACKAGES FOR FRESH FRUITS AND VEGETABLES

The Institute has collected five samples of Corrugated Fiber Board boxes used as bulk packages. These bulk packages are having different tare weight and used for different category of fruits and vegetables. These samples are tested in the laboratory for the following parameters in order to evaluate the quality of these packaging materials.

- External Dimensions (LxWxH) in mm
- Style of box (RSC or Die-cut)
- Tare weight (gms.)
- Material of construction
- No. of plies(3 ply or 5 ply)
- Grammage (gms. /m²)
- Compression Strength (Kgf)
- Bursting Strength(Kg/Cm²)
- Cobb value (g/m²)

The average test values of different parameters are calculated and given in a tabular form as Annexure - I

Based on the test values, the following observations are made.

- 5.1 It is observed that all the bulk packages are made of corrugated fiber board boxes and these are generally Regular Slotted Container or telescopic or lid and tray type.
- 5.2 In most of the cases, the bursting strength values are found to be low as compared to the specified technical specification. Bursting strength is considered to be one of the important parameter as it indicates about the quality of paper being used for making the corrugated fiber board. Moreover, it is also observed that the specified value in the existing specification is on the lower side and hence, this needs to be upgraded.
- 5.3 Compression strength is considered to be the most important parameter for the quality evaluation of corrugated fiber board boxes as bulk package. Compression strength normally dictates about the load bearing capacity of the boxes. In addition, compression strength also determine about the number of stack high of the bulk packages to be stacked at the godown during storage and transportation. Due to this fact, compression strength of bulk package should comply with the specified values. But it is observed that in most of the cases, the compression strength of the sample boxes are found to be very low as compared to the specified values of the existing specifications. This clearly indicates that the exporters are not really using good quality

boxes and hence there will be more damages of bulk packages during storage as boxes are normally stacked upto 8-10 stack high.

5.4 Considering the existing practice of handling, storage and transportation of bulk packages for fresh fruits and vegetables for exports, it is observed that the specified values of compression strength will not be sufficient to withstand in the hazards being created during the operation and hence, the existing specifications will be required to be updated.

5.5 Cobb value or Water Absorption test is one of the important tests to assess the quality of paper use for the construction of corrugated fiber board. Higher Cobb value indicates about the poor quality of kraft paper used for the fabrication of corrugated fiber board. It also indicates that the poor quality of kraft paper will absorb more moisture, resulting into the higher Cobb values. Due to this fact, the compression strength will also be deteriorated. Moreover, in case of fruits and vegetable, the corrugated boxes are also stored in the refrigerated condition. Hence, the quality of the boxes should have the capacity to withstand in the high humidity condition. Because in the high humidity condition, there are always chances that the strength of the kraft paper liner will show poor results due to the absorption of high moisture contents. Due to these facts, the Cobb value of corrugated fiber boxes is very important. In most of the cases, it is observed that the Cobb value of CFB boxes are found too high as

compared to the specified test values. This clearly indicates that the exporters are not using the corrugated fiber boxes as per the standard specifications. As a result, there will be definitely complaint about the damages of bulk packages during handling, storage and transportation.

5.6 As the Cobb value indicates about the quality of paper and hence, the good quality of paper with lower moisture absorption is required to be chosen so that the boxes would be able to withstand all kinds of hazards during transit.

Considering the above, it is felt that there is an urgent need to upgrade the existing specifications of packaging and formulate the revised specification of bulk packages made of corrugated fiber board boxes in order to meet the requirement of current practices adopted for export market. The photographs of bulk packages made of corrugated fibre board boxes being used currently by the exporters are given in Appendix –I (photographs 1 – 12).

6. DEVELOPMENT OF BULK PACKAGE

6. DEVELOPMENT OF BULK PACKAGE IN LINE WITH INTERNATIONAL STANDARDS

In order to develop the bulk packages for fresh fruits and vegetables, the following International standards related to packaging and transportation of fresh fruits and vegetables were referred.

1. Manual on the packaging of fresh fruits and vegetables by International Trade Centre, UNCTAD/GATT (1988 edition)
2. Guide to food transport-fruits and vegetables. (Mercentla Publication 1989)

This manual helped us to understand about the packaging trends in the International market. Accordingly, it is found that the following packaging material are normally used as a bulk package for the packaging of fresh fruits and vegetables for export.

- Corrugated Fibre Board boxes
- Moulded Expanded Polystyrene Box
- Jute /Hessian bags
- Poly Propylene based Leno bags
- Nylon based net bags

6.1 **CORRUGATED FIBRE BOARD BOXES AS BULK PACKAGE**

Considering the international practice being adopted in the overseas market, the bulk packages are developed by considering the following important factors :

- (a)Net weight of the each package
- (b) Nature of fruits and vegetables
- (c) Stack height during storage
- (d) Stacking pattern during transportation
- (e) Handling system
- (f) Mode of transportation

While developing the bulk packages, it is observed that the following four designs of corrugated fibre board boxes are very popular in the international market.

S.No.	Style of Box	International Code
1	Regular slotted containers	0201
2	Telescopic box (2pcs.)	0300
3	Lid and tray box	0306
4	Die-cut single piece corrugated box	0312

The relevant photographs are given in Appendix – II (photographs 13 – 16).

The above said design of the corrugated boxes are considered where the glued joints are recommended. In general, the telescopic style of boxes offer good compression strength. The boxes are erected by folding the bottom flaps and boxes are closed by means of pressure sensitive plastic tapes.

- i. The boxes are developed to carry out the study by using certain variety of fresh fruits.. The following fruits were considered for conducting the laboratory trial in order to assess the adequacy of packaging systems.

- Orange
- Custard apple
- Pomogrenate
- Banana
- Grapes
- Mangoes– different varieties like
 - Alphonso,
 - Kesar,
 - Dusheri,
 - Banganpalli &
 - Chausa

ii. The boxes are developed to carry out the study by using certain variety of fresh vegetables. The following vegetables were considered for conducting the laboratory trial in order to assess the adequacy of packaging systems.

- Green chillies
- Brinjal (big & small)
- Papadi
- Kantola
- Tindola
- Bitter gourd
- Okra
- Potatoes
- Baby Corn

Since the fresh fruits and vegetable are perishable in nature, these goods are normally exported by air. However, potatoes are exported by sea in refrigerated multimodal containers. Volume utilization in a refrigerated container is an important aspect and is considered for arriving at dimensional details of the direct bulk packs. Optimum utilization of space in a container offers freight advantage.

iii. The bulk packages are developed where the dimension of the individual boxes are finalized by considering the standard dimension of Euro pallets i.e.

- 1200 mm x 1000 mm (L x W) and
- 1200 mm x 800 mm. (L x W)

iv. The attempts are taken to standardize the box dimension of different style for the packaging of fresh fruits and vegetables.

v. The recommended dimensions of bulk package made of corrugated fiber board boxes is given in Annexure – II.

vi. The relevant photographs are given in Appendix- III

6.2. BOX WITH MOULDED PULP TRAYS

Moulded pulp trays with cavities are developed to hold individual orange. Depending upon the size of the orange, moulded trays are made to suit each size and therefore the number of oranges per tray may vary. Each box is meant to hold about 15 Kgs of oranges. Depending upon the size/number of oranges, 4 to 5 layers of trays are packed per box. The relevant drawing (No. 2) and photographs are given in Appendix – II and Appendix III (Photographs Nos. 14 & 50)

6.3 BOX WITH SLOTTED PARTITIONS

Slotted partitions of corrugated fibre board are placed inside the box and individual oranges are placed in each slot. Individual layers are separated

by Corrugated Fibre Board plates. As in the above case the number of oranges/number of layers vary depending upon the orange size. Each box is meant to hold about 15kg. of oranges.

6.3.1 The relevant drawing (No.3) and photographs are given in Appendix II and Appendix – III (Photographs Nos. 15 & 49).

6.3.2 Similarly in case of custard apple also, box with slotted partitions was considered and is given in Appendix III (Photograph No. 45 & 46).

6.3.3 In case of Bananas, a telescopic, half R.S.C. type corrugated fibre board box (5 ply Corrugated Fibre Board tray and 3 ply Corrugated Fibre Board lid) having ventilations holes of diameter 30mm is recommended. Total 16 nos. of holes, 6 each at front and rear face of the box, 2 each at both ends of the box and two cuts one at each end for manually lifting the box were provided. HMHDPE perforated bag of 100 gauge is placed inside the Corrugated Fibre Board box. Plastic bubble film is used as cushioning in between the banana hands and to line the inside faces of the box. One number of Ethylene Absorber Sachet is placed per pack. The relevant photographs is given in Appendix III (Photograph No. 53)

6.4 CLOSURE AND REINFORCEMENT

The Corrugated Fibre Board boxes are to be closed by folding the top flaps and by application of pressure sensitive tape. The telescopic boxes are closed by placing the lid on top. For reinforcement, the boxes are to be provided with two heat sealable synthetic straps.

6.5 TECHNICAL SPECIFICATIONS

The box specifications are drawn up with respect to box style, dimensions, type of fluting, grammage of board, bursting strength of the board. The type of ventilation to be provided has also been indicated. The specification details are given in Annexure III- A to Annexure III – Ao.

The specification details of pressure sensitive tape and reinforcement strap are given in Annexure-IV.

6.6 MOULDED EXPANDED POLYSTYRENE BOX

Moulded expanded polystyrene box has also been considered for packaging custard apple and vegetables like green chillies, okra, papadi, tindola, kantola, brinjal and bittergourd. The recommended dimensions for EPS boxes are given in Annexure VII

6.6.1 The relevant drawing and photographs are given in Appendix – IV.

(Photograph nos. 66, 67, 68, 69,70,71, 72,73,74 & 75)

The specification details for Expanded Polystyrene box are given in Annexures– VIII A – Annexure VIIIE.

6.7 JUTE /LENO /NET BAGS

The following direct bulk packs were also developed for potatoes/ onions / arbi and yam based on the results of the simulated laboratory transport worthiness tests.

1. Jute bags
2. Leno bags
3. Net bags

The bags made from the above materials were filled with the above vegetables and the mouth of the bag was closed by stitching. Transport worthiness tests indicated that the performance of jute bags, net bags and leno bags were satisfactory. No damage to the bags nor to the product was observed.

The specification details have been drawn up w.r.t. to jute, net and leno bags and are given in Annexure IXA - Annexure IX-L.

6.7.1 The relevant drawing and photographs are given in Appendix – V.
(Photograph nos. 76, 77, 78, 79, 80, 81, 82 & 83).

7. PALLETISATION AND CONTAINERISATION DETAILS –DIRECT BULK PACKAGE (CFB)

7. PALLETISATION AND CONTAINERISATION – DIRECT BULK PACK (Corrugated FibreBoard)

Most of the fruits and vegetables are transported by air. The packages are stored or transported as a pallet load. To maximize savings in distribution costs, pallet loads should be established as soon as possible in the distribution chain and remain unbroken as long as possible.

For international trade the ISO has specified two standard dimensions as the primary handling unit size, these are:

- 1200 x 1000 mm
- 1200 x 800 mm

The above two pallet sizes are used for distribution of fresh fruits and vegetables within Europe as well as for transportation of produce arriving unpalletised from European seaports and airports to its European destination.

The other mode of transportation, especially for potatoes/onions could be by sea. In case of sea transportation, the bulk pack of potatoes/onions are sent as containerized cargo either in refrigerated containers, ordinary general purpose containers with one door kept open for air circulation or star vent containers in

which fans are fitted inside the container for air circulation. The standard internal dimensions of a 20 ft refrigerated containers are:

5364 x 2255 x 2255 mm.

The developed boxes when stoved inside a sea container or when placed on a pallet have dimensions modular/suitable to the pallet or container i.e. the boxes utilize maximum space to give freight advantage.

Annexure V gives the palletisation details for the developed direct bulk packs.

Annexure VI gives the containerisation details for the direct bulk packs developed for potatoes and banana.

8. DEVELOPMENT OF CONSUMER PACKAGE

8.DEVELOPMENT OF CONSUMER PACKS

Discussion with the exporters and APEDA officials reveal that so far there has been negligible exports of fruits and vegetables in consumer packs from India, and therefore no consumer packaging system for exports exists.

The following fruits and vegetables were considered for developing consumer packs of different capacities.

Snow peas – 250 grams & 500 grams

Snap Peas– 250 grams & 500 grams

Asparagus – 200 grams & 400 grams

Cherry Tomatoes – 250 grams

Grapes – 500 grams

The alternate consumer packs considered are:

8.1 Plastic Pouch:

The flexible heat sealable pouch is a three/four side sealed Pillow pouch with ventilation holes. The pouch material recommended is Low Density Polyethylene (LDPE) or Polypropylene (PP) as it offers good printability, strength, permeability and visibility.

8.2 Plastic Punnet with Lid:

A plastic punnet with lid made of PET is suggested as the material is stronger than that of the punnets used currently. The punnets are

also provided with a locking system so that the lid firmly sets on the tray and there are no chances of it opening out.

8.3 EPS Tray/Stretch wrapped:

The vegetables are placed on a moulded expanded polystyrene and pulp tray and the tray is wrapped with a cling film.

8.4 Stretch Wrapped :

Vegetable like asparagus is bundled and stretch wrapped using a cling film.

9.FEATURES AND SPECIFICATIONS OF THE SUGGESTED CONSUMER PACKAGING MATERIALS

9. FEATURES AND SPECIFICATIONS OF THE SUGGESTED CONSUMERPACKAGING MATERIALS.

9.1 Plastic Pouch

The flexible heat sealable pouches are provided with a number of holes which allows the air to circulate in and around the pack and help in prolonging the shelf-life of the fresh produce. Since the material of construction of the pouches is transparent, it enhances the natural colours of the fresh produce.

9.2 Plastic Punnets with lids

Punnets are clear, bright containers which offer product visibility. Holes provide ventilation and circulation of air thereby retaining the freshness of the produce. The containers are light weight, stackable and recyclable.

9.3 EPS Tray

These trays are clean, neat in appearance and light in weight. They give a cushioning effect to the products packed inside. The trays can be easily moulded in any size and shape. The materials used can be easily cleaned, re-used and is also recyclable.

9.4 Stretch Film/Cling Film

The stretch film is a transparent film with the property of clinging to the product packed when stretch wrapped. It can be applied without application of heat. The film is semi-

permeable and allows exchange of gases for respiration of the produce.

The dimensional details of the consumer packs are given in Annexure X A - Annexure X D.

The specification details of the recommended consumer packaging materials are given in Annexure XI.

10.DEVELOPMENT OF TRANSPORT PACKAGE FOR CONSUMER PACKS

10.DEVELOPMENT OF TRANSPORT PACK FOR CONSUMER PACKS.

For the transportation of developed consumer packs, outer boxes have been developed to hold a suitable number of consumer packs.

The transport boxes are developed from corrugated fibre board as per the international practice, taking into consideration the following factors.

- Nature of the produce
- Net weight of contents
- Stacking during transportation
- Mode of transportation
- Modularity with Euro pallets.

The dimensional details of the transport packs are given in Annexure-XIIA to XII D.

The various alternates considered and placement of consumer packs for different products are given below and in Annexure XIII and photographs in Appendix VI.

10.1. Snow Peas (*Pisum sativum var. saccharatum*)/ Snap Peas (*Pisum sativum var. macrocarpon*)

a)Flexible Plastic Pouch

For the above consumer packs the box styles considered are RSC (0201), Telescopic (0312). 12 consumer packs of 250 gms. capacity are placed in 3 x 2 x 2 pattern and 8 consumer packs of 500gms.

capacity are placed in 2 x 2 x 2 manner. The layers of consumer pack are separated by a Corrugated Fibre Board plate. (Photograph No.84)

b)Plastic Punnet with Lid

8 plastic punnets of 250 gms. And 500 capacity are packed in one layer inside a one-piece, tuck-in –type box (Drawing No. 4 & Photograph No. 85).

c)EPS Tray Stretch Wrapped

The box styles considered are (0306) and (0312). 8 consumer packs of 250gms. are placed in 2 x 2 x 2 manner. The two layers are separated by a Corrugated Fibre Board plate. (Photograph No. 86).

10.2. Cherry tomatoes (*Solanum lycopersicum var. cerasiforme*)

a) Flexible Plastic Pouch

9 consumer packs of 250 gms. capacity are placed in 3 x 3x manner in a outer transport pack which is a Corrugated Fibre Board box of RSC (0201) or telescopic (0300), (0306) or (0312) style.(Photograph No. 87).

b) Plastic Punnet with Lid

8 plastic punnets of 250 gms. capacity are packed in one layer inside a one piece tuck-in-type box (Drawing No. 4 & Photograph No. 88).

c) EPS tray Stretch wrapped

The box styles considered are RSC (0201), Telescopic(0300),(0306) and (0312). 8 consumer packs of 250 gms. are placed in 2 x 2 x 2 manner. The two layers are separated by a Corrugated Fibre Board plate (Photograph No. 89).

10.3. Asparagus (Asparagus officinalis)

a) Flexible Plastic Pouch

8 consumer packs of 200 gms. capacity are packed in 2 layers in 2 x 2x 4 manner in a outer transport pack which is a Corrugated Fibre Board box of telescopic type (0300).

b) EPS tray Stretch wrapped

The box styles considered are telescopic (0306) and (0312). 8 consumer packs of 400 gms. are placed in 2 x 2 x 2 manner. The two layers are separated by a Corrugated Fibre Board plate (photograph No. 90 & 92).

c) Stretch wrapped in bunches

8 stretch wrapped bundles of asparagus of 200 grams capacity are placed in an outer transport pack which is a Corrugated Fibre Board box of telescopic style (0300). The placement pattern of the

consumer packs in the transport pack is 1 x 4 x 2 manner.
(Photograph No. 91)

10.4. Grapes (*Vitis vinifera*)

a) Plastic Punnet with Lid

10 plastic punnets of 500 gms. capacity are packed in one layer inside a one piece tuck-in-type box . (Drawing No. 4)

10.5 CLOSURE AND REINFORCEMENT OF TRANSPORT PACK

The RSC (0201) style boxes are closed by folding the top flaps and by application of pressure sensitive tape. The telescopic boxes are closed by placing the lid on the tray. The boxes are reinforced with synthetic straps.

The placement of consumer packs in transport pack is given in Annexure XIII.

11. SPECIFICATION DETAILS OF TRANSPORT PACKAGE FOR CONSUMER PACKS

11. SPECIFICATION DETAILS OF TRANSPORT PACK FOR CONSUMERPACKS

The box specifications are drawn up with respect to box style, dimensions, type of fluting, grammage of board, bursting strength, burst factor and Cobb value of the board and compression strength of the box. The type of ventilation to be provided has also been indicated. The specification details are given in Annexure XIV A – Annexure XIV J.

The specification details of partitions/separator plates are given in Annexure XV.

The specification details of pressure sensitive tape and reinforcement strap are given in Annexure IV.

12.PALLETISATION DETAILS - TRANSPORT PACKAGE FOR CONSUMER PACKS

12. PALLETISATION - TRANSPORT PACK FOR CONSUMER PACKS

The consumer packs of selected fresh vegetables packed in outer transport packs are exported by air. The loads are generally palletised. The two standard dimensions of Euro pallets for fresh produce are:

- a) 1200 mm x 1000 mm
- b) 1200 mm x 800 mm

The suggested transport pack dimensions are modular to the Euro pallets.

In addition to above IATA pallet sizes were also considered. These are:

- a) IATA A 3070 mm x 2130 mm
- b) IATA B 3070 mm x 2340 mm

Annexure XVI gives the palletisation details for the developed transport pack for consumer packs.

ANNEXURES

ANNEXURE I

LABORATORY EVALUATION OF MASTER CARTONS

STYLE OF THE BOX	EXTERNAL DIMENSIONS (L x W x H) (mm)	TARE WEIGHT (GMS)	MATERIAL OF CONSTRUCTION	NO. OF PLIES	GRAMMAGE (g/m ²) (OUTER TO INNER PLY)	COMPRESSION STRENGTH (Kg/)	BURSTING STRENGTH (Kg/Cm ²)	COBB TEST (g/m ² /) (30min)
RSC	460X315X120	550	CFB	5	293/148/152/148/151	262	14	209
LID & TRAY	390X310X132	595	CFB	3	152/148/151	371	Lid : 12.30 Tray: 13.20	Lid : 157.50 Tray: 163.5
LID & TRAY	400X320X145	550	CFB	3	Lid: 217/165/200 Tray:213/154/262	310	Lid : 10.20 Tray: 13.20	Lid : 280.00 Tray: 252.00
LID & TRAY	404X310X147	677.50	CFB	3	Lid: 248/221/174 Tray:241/264/257	414.50	Lid : 10.00 Tray: 1020	Lid : 324.00 Tray: 400.00
LID & TRAY	375X257X85	320.00	CFB	3	Lid: 253/144/149 Tray:236/198/238	304.00	Lid : 5.20 Tray: 10.70	Lid : 367.50 Tray: 130.00
LID & TRAY	400X312X155	720.00	CFB	3	Lid: 218/220/216 Tray:250/260/250	319.00	Lid : 12.80 Tray: 13.00	Lid : 159.50 Tray: 180.00
LID & TRAY	400X312X155	720.00	CFB	3	Lid: 218/220/216 Tray:250/260/250	319.00	Lid : 12.80 Tray: 13.00	Lid : 159.50 Tray: 180.00
LID & TRAY	390X310X125	565.00	CFB	3	Lid: 250/261/256 Tray:100/250/260	352.50	Lid : 11.30 Tray: 13.50	Lid : 250.50 Tray: 266.50
RSC	370X270X105	505	CFB	5	307/154/133/152/136	187	14	109
LID & TRAY	400X312X155	720.00	CFB	3	Lid: 218/220/216 Tray:250/260/250	352.50	Lid : 11.30 Tray: 13.50	Lid : 250.50 Tray: 266.50

ANNEXURE II

RECOMMENDED DIMENSIONS FOR DIRECT BULK PACKS

(CFB BOX)

SR. NO.	PRODUCT	CAPACITY (KG)	EXTERNAL DIMENSIONS OF BULK PACK L x W x H (mm)
1	Tindola	5	400 x 200 x 150
	Kantola	5	
	Brinjal (small)	5	
	Bitter gourd	5	
2	Green Chillies	5	400 x 300 x 180
	Brinjal (big)	5	
	Papadi	5	
	Tindola	10	
	Okra	5	
	Bitter gourd	5	
	Potatoes	10	
3	Bitter gourd	10	500 x 300 x 200
	Brinjal (small)	10	
	Okra	10	
	Papadi	10	
	Kantola	10	
4	Green Chiiles	10	600 x 300 x 200
5	Brinjal (Big)	10	600 x 300 x 200
6	Baby Corn	2	300 x 200 x 90
		4	400 x 300 x 125
7	Orange	15	520 x 315 x 300
8	Pomegranate	3.5	400 x 200 x 105
		5	380 x 270 x 125
9	Custard Apple	3 (12 nos.)	380 x 240 x 90
10	Banana	5	333 x 300 x 200
		7	333 x 300 x 255
		13	545 x 330 x 255
		18	750 x 300 x 200
11	Grapes	1	200 x 200 x 75

12	Mangoes		
	• Alphonso	6 nos 9 nos 12 nos 15 nos 18 nos.	225 x 170 x 90 225x 225 x 90 320 x 230 x 90 390 x 225 x 90 460 x 250 x 90
	• Kesar	6 nos 9 nos 12 nos 15 nos 18 nos.	225 x 170 x 100 225 x 225 x 100 260 x 230 x 100 350 x 220 x 100 420 x 220 x 100
	• Dusheri	6 nos 9 nos 12 nos 15 nos 18 nos	200 x 200 x 95 300 x 205 x 95 330 x 210 x 95 350 x 210 x 95 420 x 220 x 95
	• Banganapalli	6 nos 9 nos 12 nos 15 nos 18 nos	230 x 180 x 100 250 x 230 x 100 330 x 250 x 100 390 x 240 x 100 460 x 250 x 100
	• Chausa	6 nos 9 nos 12 nos 15 nos 18 nos	230 x 185 x 100 230 x 230 x 100 305 x 220 x 100 390 x 220 x 100 475 x 220 x 100

ANNEXURE III- A

SPECIFICATION DETAILS OF DIRECT BULK PACK

**PRODUCT :TINDOLA (*Coccinia grandis*) / KANTOLA (*Momordica dioica*) /
BRINGJAL (SMALL)(*Solanum melongena*) / BITTER GOURD (*Momordica charantia*)
CAPACITY : 5 Kg**

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	400 x 200 x 150	400 x 200 x 150	400 x 200 x 150	400 x 200 x 150
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 ray : 250/150/150	Lid : 250/150/150 Tray :250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF)(MIN)	40.00	40.00	40.00	40.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III- B

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT :GREEN CHILLIES (*Capsicum annum*)/ BRINGJAL (BIG))(*Solanum melongena*) / BITTER GOURD (*Momordica charantia*) / PAPADI *Dolichos lablab* / OKRA (*Abelmoschus esculentus*)
CAPACITY : 5 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	400 x 300 x 180	400 x 300 x 180	400 x 300 x 180	400 x 300 x 180
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	40.00	40.00	40.00	40.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III- C

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : TINDOLA (*Coccinia grandis*) / POTATOES (*Solanum tuberasum*)

CAPACITY :10Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	400 x 300 x 180	400 x 300 x 180	400 x 300 x 180	400 x 300 x 180
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLYS	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 14.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	38.00	50.00	50.00	50.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III- D

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : BRINGJAL (SMALL) (Solanum melongena) / BITTER GOURD (Momordica charantia) / PAPADI Dolichos lablab / OKRA (Abelmoschus esculentus)/ KANTOLA (Momordica dioica)

CAPACITY : 10Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	500 x 300 x 200	500 x 300 x 200	500 x 300 x 200	500 x 300 x 200
STYLE OF BOX **	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 14.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) *** (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	40.00	50.00	50.00	50.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - E

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : GREEN CHILIES (*Capsicum annum*)

CAPACITY : 10Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	600 x 300 x 200	600 x 300 x 200	600 x 300 x 200	600 x 300 x 200
STYLE OF BOX **	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 14.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) *** (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	36.00	46.00	46.00	46.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - F

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : BRINGAL (BIG) (*Solanum melongena*)

CAPACITY : 10Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	600 x 300 x 200	600 x 300 x 200	600 x 300 x 200	600 x 300 x 200
STYLE OF BOX **	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 14.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) *** (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	36.00	46.00	46.00	46.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - G

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : BABY CORN (Zea mays L)
CAPACITY : 2 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	300 x 200 x 90	300 x 200 x 90	300 x 200 x 90	300 x 200 x 90
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	48.00	48.00	48.00	48.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - H

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : BABY CORN (Zea mays L)

CAPACITY : 4 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	400 x 300 x 125	400 x 300 x 125	400 x 300 x 125	400 x 300 x 125
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 50/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	34.00	34.00	34.00	34.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III- I

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT :ORANGES (*Citrus sinensis*)

TPYE OF PACK :(MOULDED PULP TRAYS) & (SLOTTED PARTITIONS)

CAPACITY : 15Kg

A. CFB BOX

A. MINIMUM SPECIFICATION	
MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm)	520 x 315 x 300
STYLE OF BOX * *	TELESCOPIC - 0320
NO. OF PLIES	3.0
TYPE OF FLUTES	B (Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	25.00
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	12.00
NO. OF PIECES PER BOX	Not more than two
MANUFACTURE'S JOINT	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	500
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	16.0
DIAMETER (MM) OF POSITIONOF HOLES	20.0
TWO SIDES EACH	3
TWO ENDS EACH	1
TOP & BOTTOM EACH	4
	One slot on each of the ends of the box
B . RECOMMENDED SPECIFICATIONS	
EDGE CRUSH (KGF) (MIN)	66.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note :Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

B. PARTITIONS AND SEPARATOR PLATES

MATERIAL OF CONSTRUCTION	:	Corrugated Fibre Board
NO. OF PLIES	:	3
TYPE OF FLUTE	:	B (Narrow)
GRAMMAGE (g/m ²)	:	150/150/150
BURSTING STRENGTH (kg/cm.sq) (minimum)	:	5.00

ANNEXURE III - J

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : POMEGRANATE (*Punica granatum*)

CAPACITY : 3.5 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	400 x 200 x 105	400 x 200 x 105	400 x 200 x 105	400 x 200 x 105
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 50/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	34.00	34.00	34.00	34.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - K

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : POMEGRANATE (*Punica granatum*)

CAPACITY : 5 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	380 x 270 x 125	380 x 270 x 125	380 x 270 x 125	380 x 270 x 125
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	34.00	34.00	34.00	34.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANEXURE III - I

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : CUSTARD APPLE (*Annona reticulata*)

CAPACITY : 3.5 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	380 x 240 x 90	380 x 240 x 90	380 x 240 x 90	380 x 240 x 90
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX(KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	30.00	30.00	30.00	30.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - M

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : BANANA (Musa paradisiacal)

CAPACITY : 5 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	333 x 300 x 200	333 x 300 x 200	333 x 300 x 200	333 x 300 x 200
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 150/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	43.00	43.00	43.00	43.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III- N

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT :BANANA (*Musa paradisiacal*)

CAPACITY :7 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	333 x 390 x 250	333 x 390 x 250	333 x 390 x 250	333 x 390 x 250
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	34.00	43.00	43.00	43.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - O

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT :BANANA (*Musa paradisiacal*)

CAPACITY : 13Kg/18kg

A. CFB BOX

A. MINIMUM SPECIFICATION	
MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm)	
13 Kg	545 x 330 x 255
18 Kg	750 x 300 x 200
STYLE OF BOX * *	TELESCOPIC
NO. OF PLIES	Lid :3 Tray : 5
TYPE OF FLUTES	Lid :B (Narrow) Tray : B/B(Narrow/ Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	Lid : 250 / 150 / 150 Tray : 250 / 120 / 120 /120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.00
BURSTING STRENGTH OF BOARD (KG/ CM.SQ) (MINIMUM)	Lid :11.0 Tray : 14.0
NO. OF PIECES PER BOX	Not more than two
MANUFACTURE'S JOINT	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	500
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0
TWO SIDES EACH	3
TWO ENDS EACH	1
TOP & BOTTOM EACH	4
	One slot on each of the ends of the box
B . RECOMMENDED SPECIFICATIONS	
EDGE CRUSH (KGF) (MIN)	Lid : 37.00 / Tray : 38.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

B. SPECIFICATIONS OF BAG

i) MATERIAL	: HMHDPE
ii) WEIGHT OF THE BAG (G)	: 30
iii) THICKNESS (GAUGE)	: 100
iv) TOTAL HEIGHT OF THE BAG (MM)	: 810
v) HEIGHT OF THE BAG UPTO SEAL(MM)	: 780
vi) LENGTH OF THE BAG(MM)	: 570
vii) TOTAL WIDTH OF THE GUSSET (MM)	: 270
viii) PERFORATIONS	: Distance between two pinhole perforations should not be more than 25mm.

C. ETHYLENE ABSORBER SACHET

i) MATERIAL	: Granules of mixture of potassium permagnate and clay packed in sachets. However, any sachet containing similar material and giving the same performance can also be used.
ii) WEIGHT MATERIAL INSIDE THE SACHET (G) (MAX)	: 7gms
iii) DIMENSION OF SACHET (MM)	: 70 x 70

D. SPECIFICATIONS OF BUBBLE FILM

i) DIAMETER OF BUBBLE (MM)	: 10
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ANNEXURE III - P

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : GRAPES (*Vitis vinifera*)

CAPACITY : 1 Kg

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	200 x 200 x 75	200 x 200 x 75	200 x 200 x 75	200 x 200 x 75
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Mln)	33.00	33.00	33.00	33.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Q

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Alphonso (*Mangifera indica*)

CAPACITY : 6 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	225 x 170 x 90	225 x 170 x 90	225 x 170 x 90	225 x 170 x 90
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Min)	43.00	43.00	43.00	43.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note :Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - R

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Alphonso (*Mangifera indica*)

CAPACITY : 9 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	225 x 225 x 90	225 x 225 x 90	225 x 225 x 90	225 x 225 x 90
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 150/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Min)	39.00	39.00	39.00	39.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - S

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Alphonso (*Mangifera indica*)

CAPACITY : 12 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	320 x 230 x 90	320 x 230 x 90	320 x 230 x 90	320 x 230 x 90
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX(KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B. RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	39.00	39.00	39.00	39.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - T

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Alphonso (*Mangifera indica*)

CAPACITY : 15 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	390 x 225 x 90	390 x 225 x 90	390 x 225 x 90	390 x 225 x 90
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B /B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	39.00	39.00	39.00	39.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - U

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Alphonso (*Mangifera indica*)

CAPACITY :18 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	460 x 250 x 90	460 x 250 x 90	460 x 250 x 90	460 x 250 x 90
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	39.00	39.00	39.00	39.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - V

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Kesar (*Mangifera indica*)

CAPACITY : 6 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	225 x 170 x 100	225 x 170 x 100	225 x 170 x 100	225 x 170 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) *** (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Mln)	38.00	38.00	38.00	38.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - W

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Kesar (*Mangifera indica*)

CAPACITY :9 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	225 x 225 x 100	225 x 225 x 100	225 x 225 x 100	225 x 225 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Min)	41.00	41.00	41.00	41.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - X

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Kesar (*Mangifera indica*)

CAPACITY : 12 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	260 x 230 x 100	260 x 230 x 100	260 x 230 x 100	260 x 230 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	4100	41.00	41.00	41.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Y

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Kesar (*Mangifera indica*)

CAPACITY : 15 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	350 x 220 x 100	350 x 220 x 100	350 x 220 x 100	350 x 220 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	41.00	41.00	41.00	41.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Z

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Kesar (*Mangifera indica*)

CAPACITY : 18nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	420 x 220 x 100	420 x 220 x 100	420 x 220 x 100	420 x 220 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B /B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	41.00	41.00	41.00	41.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Aa

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Dusheri (Mangifera indica)

CAPACITY : 6 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	200 x 200 x 95	200 x 200 x 95	200 x 200 x 95	200 x 200 x 95
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIn)	38.00	38.00	38.00	38.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Ab

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Dusheri (*Mangifera indica*)

CAPACITY : 9 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	300 x 205 x 95	300 x 205 x 95	300 x 205 x 95	300 x 205 x 95
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLYS	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) *** (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Min)	33.00	33.00	33.00	33.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Ac

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Dusheri (*Mangifera indica*)

CAPACITY : 12 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	330 x 210 x 95	330 x 210 x 95	330 x 210 x 95	330 x 210 x 95
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLYS	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	32.00	32.00	32.00	32.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Ad

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Dusheri (*Mangifera indica*)

CAPACITY : 15 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	350 x 210 x 95	350 x 210 x 95	350 x 210 x 95	350 x 210 x 95
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B /B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	32.00	32.00	32.00	32.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Ae

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Dusheri (*Mangifera indica*)

CAPACITY : 18 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	420 x 220 x 95	420 x 220 x 95	420 x 220 x 95	420 x 220 x 95
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	32.00	32.00	32.00	32.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Af

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Banganpalli (*Mangifera indica*)

CAPACITY : 6 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	230 x 180 x 100	230 x 180 x 100	230 x 180 x 100	230 x 180 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Min)	42.00	42.00	42.00	42.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Ag

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Banganpalli (*Mangifera indica*)

CAPACITY : 9 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	250 x 230 x 100	250 x 230 x 100	250 x 230 x 100	250 x 230 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 50/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Min)	41.00	41.00	41.00	41.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used

ANNEXURE III - Ah

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Banganpalli (*Mangifera indica*)

CAPACITY : 12 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	330 x 250 x 100	330 x 250 x 100	330 x 250 x 100	330 x 250 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B. RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	40.00	40.00	40.00	40.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Ai

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Banganpalli (*Mangifera indica*)

CAPACITY : 15 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	390 x 240 x 100	390 x 240 x 100	390 x 240 x 100	390 x 240 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	41.00	4100	41.00	41.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - A_j

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Banganpalli (*Mangifera indica*)

CAPACITY : 18 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	460 x 250 x 100	460 x 250 x 100	460 x 250 x 100	460 x 250 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G / M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	41.00	4100	41.00	41.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Ak

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Chausa (*Mangifera indica*)

CAPACITY : 6 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	230 x 185 x 100	230 x 185 x 100	230 x 185 x 100	230 x 185x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Min)	33.00	33.00	33.00	33.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - AI

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Chausa (*Mangifera indica*)

CAPACITY : 9 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	230 x 230 x 100	230 x 230 x 100	230 x 230 x 100	230 x 230 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (Min)	33.00	33.00	33.00	33.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - Am

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Chausa (*Mangifera indica*)

CAPACITY : 12 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	305 x 220 x 100	305 x 220 x 100	305 x 220 x 100	305 x 220 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	48.00	48.00	48.00	48.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - An

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Chausa (*Mangifera indica*)

CAPACITY : 15 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	390 x 220 x 100	390 x 220 x 100	390 x 220 x 100	390 x 220 x 100
STYLE OF BOX **	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 /120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) *** (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B .RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	48.00	48.00	48.00	48.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE III - A₀

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : Mangoes – Chausa (*Mangifera indica*)

CAPACITY : 18 nos.

A. MINIMUM SPECIFICATION				
MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	475 x 220 x 100	475 x 220 x 100	475 x 220 x 100	475 x 220 x 100
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
TYPE OF FLUTES	B/B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	450	450	450	450
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4
B . RECOMMENDED SPECIFICATIONS				
EDGE CRUSH (KGF) (MIN)	48.00	48.00	48.00	48.00

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE IV
SPECIFICATION DETAILS OF
PRESSURE SENSITIVE TAPE & REINFORCEMENT STRAP

A. PRESSURE SENSITIVE TAP

- i) **MATERIAL OF CONSTRUCTION** : BOPP OR PVC
(BIAXALLY ORIENTED
POLYPROPYLENE OR
POLYVINYL CHLORIDE)
- ii) **THICKNESS** : 20 μ
- iii) **WIDTH (MINIMUM)** : 50 MM
- iv) **ADHESIVE PROPERTY** : AS PER IS:3676-1986

FOR FURTHER SPECIFICATION DETAILS REFER IS: 2880-1978

B. REINFORCEMENT STRAP

- i) **MATERIAL OF CONSTRUCTION** : PP (POLYPROPYLENE)
- ii) **WIDTH (MINIMUM)** : 12 MM
- iii) **THICKNESS (MINIMUM)** : 0.05 MM
- iv) **BREAKING LOAD(MIN.)** : 80 KG/12 MM WIDTH
- v) **ELONGATION (MAX.)** : 25%

ANNEXURE V

PALLETISATION DETAILS – DIRECT BULK PACKS

S.NO	EXTERNAL DIMENSIONS OF THE BOX LXBXH(mm)	TYPE OF PALLET	NO. OF BOXES PER LAYER (ON BASE)	ARRANGEMENT OF BOXES ON PALLET BASE (LXW)	BASE AREA UTILISATION (%)
1.	400X200X150	IATA-A	75	15(W)X5(L)	91.76
		IATA-B	77	7(L)X11(W)	85.75
		EURO-A	12	3(L)X4(W)	100.00
		EURO-B	15	3(L)X5(W)	100.00
2.	500X300X200	IATA-A	42	6(L)X7(W)	96.34
		IATA-B	42	6(L)X7(W)	87.70
		EURO-A	4	2(L)X2(W)	62.50
		EURO-B	8	4(W)X2(L)	100.00
3.	400X300X180	IATA-A	50	10(W)X5(L)	91.76
		IATA-B	50	10(W)X5(L)	83.52
		EURO-A	8	4(W)X2(L)	100.00
		EURO-B	9	3(L)X3(W)	90.00
4.	300X200X90	IATA-A	100	10(L)X10(W)	91.76
		IATA-B	70	10(L)X7(W)	97.34
		EURO-A	8	4(L)X2(W)	83.25
		EURO-B	12	4(L)X3(W)	99.90
5.	400X300X125	IATA-A	50	10(W)X5(L)	91.76
		IATA-B	50	10(W)X5(L)	83.52
		EURO-A	8	4(W)X2(L)	100.00
		EURO-B	9	3(L)X3(W)	90.00
6.	380X240X90	IATA-A	64	8(L)X8(W)	89.26
		IATA-B	72	8(L)X9(W)	91.41
		EURO-A	10	5(W)X2(L)	95.00
		EURO-B	12	3(L)X4(W)	91.20
7.	600X300X200	IATA-A	35	5(L)X7(W)	96.34
		IATA-B	35	5(L)X7(W)	87.70
		EURO-A	4	2(L)X2(W)	75.00
		EURO-B	6	2(L)X3(W)	90.00

S.NO	EXTERNAL DIMENSIONS OF THE BOX LXBXH(mm)	TYPE OF PALLET	NO. OF BOXES PER LAYER (ON BASE)	ARRANGEMENT OF BOXES ON PALLET BASE (LXW)	BASE AREA UTILISATION (%)
8.	400X200X105	IATA-A	75	15(W)X5(L)	91.76
		IATA-B	77	7(L)X11(W)	85.75
		EURO-A	12	3(L)X4(W)	100.00
		EURO-B	15	3(L)X5(W)	100.00
9.	380X270X125	IATA-A	56	8(L)X7(W)	87.87
		IATA-B	66	11(W)X6(L)	94.26
		EURO-A	8	4(W)X2(L)	85.50
		EURO-B	9	3(L)X3(W)	76.95
10.	520X315X300	IATA-A	36	9(W)X4(L)	90.18
		IATA-B	36	9(W)X4(L)	82.08
		EURO-A	4	2(L)X2(W)	68.25
		EURO-B	6	2(L)X3(W)	81.90
11.	750X300X200	IATA-A	28	4(L)X7(W)	96.34
		IATA-B	30	10(W)X3(L)	93.93
		EURO-A	4	4(W)X1(L)	93.95
		EURO-B	4	4(W)X1(L)	75.00
12.	333X300X200	IATA-A	63	9(L)X7(W)	96.25
		IATA-B	70	10(W)X7(L)	97.34
		EURO-A	8	4(W)X2(L)	83.25
		EURO-B	12	4(W)X3(L)	99.90
13.	260X230X100	IATA - A	104	13(L)X8(W)	95.11
		IATA - B	117	13(L)X9(W)	97.39
		EURO -A	12	4 (L)X3(W)	74.75
		EURO-B	16	4(L)X4(W)	79.73
14.	545X330X255	IATA-A	30	5(L)X6(W)	82.51
		IATA-B	36	9(W)X4(L)	90.13
		EURO-A	4	2(L)X2(W)	74.94
		EURO-B	6	2(L)X3(W)	89.93

S.NO	EXTERNAL DIMENSIONS OF THE BOX LXBXH(mm)	TYPE OF PALLET	NO. OF BOXES PER LAYER (ON BASE)	ARRANGEMENT OF BOXES ON PALLET BASE (LXW)	BASE AREA UTILISATION (%)
15.	200X200X75	IATA - A	150	15 (L)X10(W)	92.00
		IATA - B	165	15 (L)X11(W)	92.00
		EURO -A	24	6(L) X 4(W)	100.00
		EURO-B	24	6(L) X 5(W)	100.00
16.	225X170X90	IATA - A	162	18 (L)X9(W)	94.76
		IATA - B	180	18(L)X10(W)	95.64
		EURO -A	21	7 (L)X3(W)	83.67
		EURO-B	28	7 (L)X4(W)	89.25
17.	225X225X90	IATA - A	117	13 (L)X9(W)	90.58
		IATA - B	130	13(L)X10(W)	91.61
		EURO -A	15	5 (L)X3(W)	79.10
		EURO-B	20	5 (L)X4(W)	84.38
18.	320X230X90	IATA - A	81	9 (L)X9(W)	91.17
		IATA - B	91	13(L)X7(W)	93.23
		EURO -A	10	5 (L)X2(W)	76.67
		EURO-B	15	5 (L)X3(W)	92.00
19.	390X225X90	IATA - A	65	13 (L)X5(W)	87.23
		IATA - B	78	13(L)X6(W)	95.28
		EURO -A	10	5 (L)X2(W)	91.41
		EURO-B	12	3(L)X4(W)	87.75
20.	460X250X90	IATA - A	48	12 (L)X4(W)	84.42
		IATA - B	60	12(L)X5(W)	96.05
		EURO -A	6	2 (L)X3(W)	71.88
		EURO-B	8	4(L)X2(W)	76.67
21.	225X170X100	IATA - A	117	13 (L)X4(W)	90.58
		IATA - B	130	13(L)X10(W)	91.61
		EURO -A	15	5 (L)X3(W)	79.10
		EURO-B	20	5(L)X4(W)	84.38
22.	225X225X100	IATA - A	117	13(L)X9(W)	90.58
		IATA - B	130	13(L)X10(W)	91.61
		EURO -A	15	4 (L)X3(W)	74.75
		EURO-B	20	5(L)X4(W)	84.38
23.	260X230X100	IATA - A	104	13(L)X8(W)	95.11
		IATA - B	117	13(L)X9(W)	97.39
		EURO -A	12	4 (L)X3(W)	74.75
		EURO-B	16	4(L)X4(W)	79.73

S.NO	EXTERNAL DIMENSIONS OF THE BOX LXBXH(mm)	TYPE OF PALLET	NO. OF BOXES PER LAYER (ON BASE)	ARRANGEMENT OF BOXES ON PALLET BASE (LXW)	BASE AREA UTILISATION (%)
24.	350X220X100	IATA – A	78	13(L)X8(W)	91..55
		IATA – B	80	8(L)X10(W)	85.75
		EURO –A	10	5 (L)X2(W)	80.21
		EURO-B	12	3(L)X4(W)	77.00
25.	420X220X100	IATA - A	65	13(L)X5 W)	91.85
		IATA - B	70	7(L)X10(W)	90.04
		EURO -A	6	2(L)X3(W)	57.75
		EURO-B	10	5(L)X2(W)	77.00
26.	200X200X95	IATA - A	150	15(L)X10 W)	91.76
		IATA - B	165	15(L)X11(W)	91.87
		EURO -A	24	6 (L)X2(W)	100.00
		EURO-B	30	6(L)X5(W)	100.00
27.	300X205X95	IATA - A	100	10(L)X10 W)	94.05
		IATA - B	110	10(L)X11(W)	94.17
		EURO -A	12	4 (L)X3(W)	76.88
		EURO-B	16	4(L)X4(W)	82.00
28.	330X210X95	IATA - A	90	9(L)X10 W)	95.38
		IATA - B	99	9(L)X11(W)	95.50
		EURO -A	10	5 (L)X2(W)	72.19
		EURO-B	15	5(L)X3(W)	86.63
29.	350X210X95	IATA - A	84	14(L)X6 W)	94.42
		IATA - B	88	8(L)X11(W)	90.40
		EURO -A	10	5 (L)X2(W)	76.56
		EURO-B	12	4(L)X4(W)	73.50
30.	420X220X95	IATA - A	65	13(L)X5 W)	91.85
		IATA - B	70	8(L)X10(W)	90.04
		EURO -A	6	2 (L)X3(W)	57.75
		EURO-B	10	5(L)X2(W)	77.00
31.	230X180X100	IATA - A	153	17(L)X9 W)	96.87
		IATA - B	170	17(L)X10(W)	97.97
		EURO -A	20	5 (L)X4(W)	86.25
		EURO-B	25	5(L)X5(W)	86.25
32.	250X230X100	IATA - A	108	12(L)X9 W)	94.97
		IATA - B	120	12(L)X10(W)	96.05
		EURO -A	15	5 (L)X3(W)	89.84
		EURO-B	20	5(L)X4(W)	95.83

S.NO	EXTERNAL DIMENSIONS OF THE BOX LXBXH(mm)	TYPE OF PALLET	NO. OF BOXES PER LAYER (ON BASE)	ARRANGEMENT OF BOXES ON PALLET BASE (LXW)	BASE AREA UTILISATION (%)
33.	330X250X100	IATA - A	72	12(L)X6 W)	90.84
		IATA - B	84	12(L)X7(W)	96.47
		EURO -A	9	3 (L)X3(W)	77.34
		EURO-B	12	4(L)X3(W)	82.50
34.	390X240X100	IATA - A	60	12(L)X5 W)	85.88
		IATA - B	72	12(L)X6(W)	93.81
		EURO -A	10	5 (L)X2(W)	97.50
		EURO-B	12	3(L)X4(W)	93.60
35.	460X250X100	IATA - A	48	6(L)X8 W)	84.42
		IATA - B	54	6(L)X9(W)	86.44
		EURO -A	6	2 (L)X3(W)	71.88
		EURO-B	8	2(L)X4(W)	76.67
36.	230X185X100	IATA - A	144	16(L)X9 W)	93.70
		IATA - B	160	16(L)X10(W)	94.76
		EURO -A	20	5(W)X4(L)	88.64
		EURO-B	25	5(L)X5(W)	88.64
37.	230X230X100	IATA - A	117	13(L)X9 W)	90.58
		IATA - B	130	13(L)X10(W)	91.61
		EURO -A	15	5(L)X3(W)	79.10
		EURO-B	20	5(L)X4(W)	84.37
38.	305X220X100	IATA - A	90	10(L)X9 W)	92.35
		IATA - B	100	10(L)X10(W)	93.40
		EURO -A	10	5(W)X2(L)	69.89
		EURO-B	15	13(W)X5(L)	83.87
39.	390X220X100	IATA - A	65	13(W)X5 L)	85.28
		IATA - B	78	13(W)X6(L)	93.15
		EURO -A	10	5(W)X2(L)	89.37
		EURO-B	12	3 L)X4(W)	85.80
40.	475X220X100	IATA - A	54	6(L)X 9(W)	86.29
		IATA - B	60	6(L)X 10(W)	87.27
		EURO -A	6	2(L)X 3(W)	65.31
		EURO-B	10	5(W)X 2(L)	87.08

ANNEXURE VI

PLACEMENT IN REFER CONTAINER

DIRECT BULK PACK – POTATOES /BANANA

BOX DIMENSIONS	PLACEMENT	NO. OF BOXES	VOLUME UTILISATION (%)
400 x 300 x 180	13(l) x 7(w) x 12(h)	1092	87.43
333 x 300 x 200	16 (l) x 7(w) x 11 (h)	1232	90.24
333 x 300 x 255	16 (l) x 7(w) x 8 (h)	896	83.00
545 x 330 x 255	16 (w) x 4(L) x 8 (h)	512	86.00
750 x 300 x 200	17 (w) x 3(L) x 11 (h)	561	90.590

1200 X 800 -EURO A

1200 X 1000 -EURO B

3070 X 2130 -IATA A

3070 X 2340 -IATA B

ANNEXURE VII

RECOMMENDED DIMENSIONS FOR DIRECT BULK PACKS
(EXPANDED POLYSTYRENE BOX)

SR. NO.	PRODUCT	CAPACITY (KG)	EXTERNAL DIMENSIONS OF BULK PACK L x W x H (mm)
1	Tindola	5	390 x 320 x 180
2	Kantola	5	390 x 320 x 180
3	Brinjal (small)	5	485 x 350 x 155
4	Bitter gourd	5	485 x 350 x 155
5	Green Chillies	5	500 x 390 x 180
6	Brinjal (big)	5	500 x 390 x 180
7	Okra	5	500 x 390 x 180
8	Papadi	5	500 x 390 x 180
9	Custard Apple	5	380 x 240 x 90
10	Grapes	5	390 x 320 x 155
		9	500 x 390 x 1`80

ANNEXURE VIII– A

SPECIFICATION DETAILS OF DIRECT BULK PACK

**PRODUCT :BITTER GOURD (Momordica charantia) /
BRINJAL (SMALL) Solanum melongena**

CAPACITY : 5 Kg

MATERIAL OF CONSTRUCTION : Expanded Polystyrene

EXTERNAL DIMENSIONS (mm) : 485 x 350 x 155

STYLE OF BOX * : Lid & Tray

DENSITY OF EPS (g/cc): 0.32

NO. OF PIECES PER BOX : Not more than two

**COMPRESSION STRENGTH
(kgf) (minimum)** : 300.00

NO. OF VENTILATION HOLES : 16.00

**DIAMETER (mm) & POSITION
OF HOLES** : 20.00

TWO SIDES EACH : 3

TWO ENDS EACH : 1

TOP &BOTTOM EACH : 4

OR Equivalent Ventilation

* Or any other suitable style with equal strength and performance

ANNEXURE VIII – B

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : TINDOLA (Coccinia grandis)/ KANTOLA (Momordica dioica)

CAPACITY : 5 Kg

MATERIAL OF CONSTRUCTION : Expanded Polystyrene

EXTERNAL DIMENSIONS (mm) : 390 x 320 x 180

STYLE OF BOX * : Lid & Tray

DENSITY OF EPS (g/cc) : 0.32

NO. OF PIECES PER BOX : Not more than two

**COMPRESSION STRENGTH
(kgf) (minimum) : 300.00**

NO. OF VENTILATION HOLES : 16.00

**DIAMETER (mm) & POSITION
OF HOLES : 20.00**

TWO SIDES EACH : 3

TWO ENDS EACH : 1

TOP & BOTTOM EACH : 4

OR Equivalent Ventilation

*** Or any other suitable style with equal strength and performance**

ANNEXURE VIII – C

SPECIFICATION DETAILS OF DIRECT BULK PACK

**PRODUCT : GREEN CHILLIES (Capsicum annum)/ OKRA (Abelmoschus)
PAPADI (Dolichos lablab) / BRINJAL (BIG) (Solanum melongena)**

CAPACITY : 5 Kg

MATERIAL OF CONSTRUCTION : Expanded Polystyrene

EXTERNAL DIMENSIONS (mm) : 500 x 390 x 180

STYLE OF BOX * : Lid & Tray

DENSITY OF EPS (g/cc): 0.32

NO. OF PIECES PER BOX : Not more than two

**COMPRESSION STRENGTH
(kgf) (minimum)** : 300.00

NO. OF VENTILATION HOLES : 16.00

**DIAMETER (mm) & POSITION
OF HOLES** : 20.00

TWO SIDES EACH : 3

TWO ENDS EACH : 1

TOP & BOTTOM EACH : 4

OR Equivalent Ventilation

* Or any other suitable style with equal strength and performance

ANNEXURE VIII – D

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT : CUSTARD APPLE (Annona reticulate)

CAPACITY : 3 Kg

MATERIAL OF CONSTRUCTION : Expanded Polystyrene

EXTERNAL DIMENSIONS (mm) : 380 x 240 x 90

STYLE OF BOX * : Lid & Tray

DENSITY OF EPS (g/cc) : 0.32

NO. OF PIECES PER BOX : Not more than two

**COMPRESSION STRENGTH
(kgf) (minimum)** : 300.00

NO. OF VENTILATION HOLES : 16.00

**DIAMETER (mm) & POSITION
OF HOLES** : 20.00

TWO SIDES EACH : 3

TWO ENDS EACH : 1

TOP & BOTTOM EACH : 4

OR Equivalent Ventilation

* Or any other suitable style with equal strength and performance

ANNEXURE VIII – E

SPECIFICATION DETAILS OF DIRECT BULK PACK

PRODUCT :GRAPES(*Vitis vinifera*)

CAPACITY : 4.5/ 5 Kg & 9 kg

MATERIAL OF CONSTRUCTION : Expanded Polystyrene

EXTERNAL DIMENSIONS (mm)

4.5/ 5 kg : 390 x 320 x 155

9 kg : 500 x 390 x 1`80

STYLE OF BOX * : Lid & Tray

DENSITY OF EPS (g/cc) : 0.32

NO. OF PIECES PER BOX : Not more than two

**COMPRESSION STRENGTH
(kgf) (minimum)** : 300.00

NO. OF VENTILATION HOLES : 16.00

**DIAMETER (mm) & POSITION
OF HOLES** : 20.00

TWO SIDES EACH : 3

TWO ENDS EACH : 1

TOP & BOTTOM EACH : 4

OR Equivalent Ventilation

* Or any other suitable style with equal strength and performance

ANNEXURE IX-A

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: YAM (*Dioscorea alata*)

CAPACITY: 5 kg.

TYPE OF PACK	:	JUTE BAG
TYPE OF FABRIC	:	Hessian
GRAMMAGE (G/M²)	:	215
ENDS/DM (OR PORTER)	:	38
TOLERANCE	:	+ 2 / -1
PICKS/DM (OR SHOTS PER INCH)	:	31
Tolerance	:	+ 2 / -1
BREAKING LOAD (KGF)		
WARPWAY	:	90
WEFTWAY	:	60
SEAM STRENGTH KGF)		
BOTTOM SEAM	:	21 + / - 1
SIDE SEAM	:	25 + / - 1
STITCHING	:	Shall be 10 mm from the edge. The number of stitches per 10 cm shall be between 9 & 11

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX-B

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: YAM (*Dioscorea alata*)

CAPACITY: 13 kg.

TYPE OF PACK : JUTE BAG

TYPE OF FABRIC : Hessian

GRAMMAGE (G/M²) : 330

ENDS/DM (OR PORTER) : 68

TOLERANCE : + 4 / -1

PICKS/DM (OR SHOTS PER INCH) : 52

TOLERANCE : + 4 / -1

BREAKING LOAD (KGF)

WARPWAY : 120

WEFTWAY : 90

SEAM STRENGTH KGF)

BOTTOM SEAM : 21 + / - 1

SIDE SEAM : 25 + / - 1

**STITCHING : Shall be 10 mm from the edge.
The number of stitches per 10
cm shall be between 9 & 11**

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX-C

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: YAM (*Dioscorea alata*)

CAPACITY: 5 kg / 13 kg

TYPE OF PACK : NET BAG

MATERIAL OF CONSTRUCTION : HDPE (High Density Polyethylene)

Or

PA (Polyamide)

WEIGHT PER METRE SQUARE : 45 (Min.)

ANNEXURE IX-D

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: ARBI (*Colocasia esculenta*)

CAPACITY: 5 kg.

TYPE OF PACK : JUTE BAG

TYPE OF FABRIC : Hessian

GRAMMAGE (G/M²) : 215

ENDS/DM (OR PORTER) : 38

TOLERANCE : + 2 / -1

PICKS/DM (OR SHOTS PER INCH) : 31

Tolerance : + 2 / -1

BREAKING LOAD (KGF)

WARPWAY : 90

WEFTWAY : 60

SEAM STRENGTH KGF)

BOTTOM SEAM : 21 + / - 1

SIDE SEAM : 25 + / - 1

**STITCHING : Shall be 10 mm from the edge.
The number of stitches per 10
cm shall be between 9 & 11**

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX-E

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: ARBI (*Colocasia esculenta*)

CAPACITY: 10 kg.

TYPE OF PACK : JUTE BAG

TYPE OF FABRIC : Hessian

GRAMMAGE (G/M²) : 330

ENDS/DM (OR PORTER) : 68

TOLERANCE : + 4 / -1

PICKS/DM (OR SHOTS PER INCH) : 52

TOLERANCE : + 4 / -1

BREAKING LOAD (KGF)

WARPWAY : 120

WEFTWAY : 90

SEAM STRENGTH KGF)

BOTTOM SEAM : 21 + / - 1

SIDE SEAM : 25 + / - 1

STITCHING : Shall be 10 mm from the edge.
The number of stitches per 10
cm shall be between 9 & 11

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX-F

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: ARBI (*Colocasia esculenta*)

CAPACITY: 5 kg / 10 kg

TYPE OF PACK : NET BAG

MATERIAL OF CONSTRUCTION : HDPE (High Density Polyethylene)
Or
PA (Polyamide)

WEIGHT PER METRE SQUARE : 45 (Min.)

ANNEXURE IX-G

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: POTATO (*Solanum tuberosum*)

CAPACITY: 25 kg.

TYPE OF PACK	:	JUTE BAG
TYPE OF FABRIC	:	Hessian
GRAMMAGE (G/M²)	:	270
ENDS/DM (OR PORTER)	:	47
TOLERANCE	:	+ 2/ -1
PICKS/DM (OR SHOTS PER INCH)	:	47
Tolerance	:	+ 2/ -1
BREAKING LOAD (KGF)		
WARPWAY	:	110
WEFTWAY	:	95
SEAM STRENGTH KGF)		
BOTTOM SEAM	:	34+ / - 1
SIDE SEAM	:	36+ / - 1
STITCHING	:	Shall be 10 mm from the edge. The number of stitches per 10 cm shall be between 9 & 11

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX- H
SPECIFICATION DETAILS FOR BULK PACK

PRODUCT: POTATO (*Solanum tuberasum*)

CAPACITY: 25 kg.

TYPE OF PACK : LENO BAG
TYPE OF MATERIAL : Polypropylene

DENIER
(WEIGHT OF THE TAPE IN GRAMS
OF 9000 METERS OF TAPE LENGTH) : 700

MESH
WARP PER INCH : 5 PAIRS (10 TAPES)
WEFT PER INCH : 5 TAPES

STITCHING : Bottom sewing by chain sewing type. Mouth sewing by over lock or chain stitching. Bags can be provided with drawings.

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX-I

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: ONION (*Allium cepa*)

CAPACITY: 1 kg / 5 kg.

TYPE OF PACK : JUTE BAG

TYPE OF FABRIC : Hessian

GRAMMAGE (G/M²) : 213

ENDS/DM (OR PORTER) : 38

TOLERANCE : + 2/ -1

PICKS/DM (OR SHOTS PER INCH) : 31

Tolerance : + 2/ -1

BREAKING LOAD (KGF)

WARPCWAY : 90

WEFTWAY : 60

SEAM STRENGTH KGF)

BOTTOM SEAM : 21+ / - 1

SIDE SEAM : 25+ / - 1

STITCHING : Shall be 10 mm from the edge.
The number of stitches per 10 cm shall be between 9 & 11

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX-J

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: ONION (*Allium cepa*)

CAPACITY: 1 kg to 5 kg.

TYPE OF PACK : LENO BAG

TYPE OF MATERIAL : Polypropylene

**DENIER
(WEIGHT OF THE TAPE IN GRAMS
OF 9000 METERS OF TAPE LENGTH) :** 600

**MESH
WARP PER INCH :** 5 PAIRS (10 TAPES)
WEFT PER INCH : 5 TAPES

STITCHING : Bottom sewing by chain sewing type. Mouth sewing by over lock or chain stitching. Bags can be provided with drawings.

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX-K

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: ONION (*Allium cepa*)

CAPACITY: 15 kg to 25 kg.

TYPE OF PACK : JUTE BAG

TYPE OF FABRIC : Hessian

GRAMMAGE (G/M²) : 270

ENDS/DM (OR PORTER) : 47

TOLERANCE : + 2/ -1

PICKS/DM (OR SHOTS PER INCH) : 47

Tolerance : + 2/ -1

BREAKING LOAD (KGF)

WARPWAY : 110

WEFTWAY : 95

SEAM STRENGTH KGF)

BOTTOM SEAM : 34+ / - 1

SIDE SEAM : 36+ / - 1

**STITCHING : Shall be 10 mm from the edge.
The number of stitches per 10
cm shall be between 9 & 11**

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE IX-L

SPECIFICATION DETAILS FOR DIRECT BULK PACK

PRODUCT: ONION (*Allium cepa*)

CAPACITY: 15 kg to 25 kg.

TYPE OF PACK : LENO BAG

TYPE OF MATERIAL : Polypropylene

DENIER
(WEIGHT OF THE TAPE IN GRAMS
OF 9000 METERS OF TAPE LENGTH) : 700

MESH
WARP PER INCH : 5 PAIRS (10 TAPES)
WEFT PER INCH : 5 TAPES

STITCHING : Bottom sewing by chain sewing type. Mouth sewing by over lock or chain stitching. Bags can be provided with drawings.

Note: Wherever tolerances are not indicated the specified value to be considered as minimum value.

ANNEXURE X- A

DIMENSIONS OF CONSUMER PACKS

**PRODUCT :SNOW PEAS (*Pisum sativum var. saccharatum*)/
SNAP PEAS (*Pisum sativum var. macrocarpon*)**

A) Flexible Plastic Pouch

CAPACITY	EMPTY POUCH *		FILLED POUCH *		
	Length (l) (mm)	Width (b) (mm)	Length (l) (mm)	Width (b) (mm)	Height (h) (mm)
250 grams	250	195	190	160	60
500 grams	350	225	245	195	60

* Includes 5 mm seal width on sides and bottom

B) Plastic Punnet with Lid

CAPACITY	PUNNET SIZE					
	TRAY (mm)			LID (mm)		
	Length (l)	Width (b)	Height (h)	Length (l)	Width (b)	Height (h)
250 grams	190	115	60	To fit the tray	To fit the tray	25
500 grams	190	115	110	To fit the tray	To fit the tray	15

C) EPS Tray Stretch Wrapped

CAPACITY	TRAY SIZE		
	Length (l)	Width (b)	Height (h)
250 grams	245	145	40

ANNEXURE X- B

DIMENSIONS OF CONSUMER PACKS

PRODUCT :CHERRY TOMATOES (*Solanum lycopersicum* var. *cerasiforme*)

A) Flexible Plastic Pouch

CAPACITY	EMPTY POUCH *		FILLED POUCH *		
	Length (l) (mm)	Width (b) (mm)	Length (l) (mm)	Width(b) (mm)	H eight (h) (mm)
250 grams	240	150	165	130	30

* Includes 5 mm seal width on sides and bottom

B) Plastic Punnet with Lid

CAPACITY	PUNNET SIZE					
	TRAY (m)			LID (mm)		
	Length (l)	Width (b)	Hieght (h)	Length (l)	Width (b)	Hieght (h)
250 grams	190	115	40	To fit the	To fit the	25
				tray	tray	

C) EPS Tray Stretch Wrapped

CAPACITY	TRAY SIZE		
	Length (l)	Width (b)	Hieght (h)
250 grams	200	125	35

ANNEXURE X- C

DIMENSIONS OF CONSUMER PACKS

PRODUCT : ASPARAGUS (*Asparagus officinalis*)

A) Flexible Plastic Pouch

CAPACITY	EMPTY POUCH *		FILLED POUCH *		
	Length (l) (mm)	Width (b) (mm)	Length (l) (mm)	Width (b) (mm)	Height (h) (mm)
200 grams	310	170	180	145	20

* Includes 5 mm seal width on sides and bottom

B) EPS Tray Stretch Wrapped

CAPACITY	TRAY SIZE		
	Length (l)	Width (b)	Height (h)
400 grams	245	300	100

C) Stretch wrapped in bunches

CAPACITY	Length (l) (mm)	Width (b) (mm)	Height (h) (mm)
200 Grams	360	65	35

ANNEXURE X- D

DIMENSIONS OF CONSUMER PACKS

PRODUCT :GRAPES (Vitis vinifera)

Plastic Punnet with Lid

CAPACITY	PUNNET SIZE					
	TRAY(m)			LID(mm)		
	Length (l)	Width (b)	Hieght (h)	Length (l)	Width (b)	Hieght (h)
500 grams	190	115	80	To fit the tray	To fit the tray	15

ANNEXURE-XI

SPECIFICATION OF CONSUMER PACKS

A. Flexible Pouches (250 gms, 500 gms.)

Material of pouch	:	LDPE or PP
Thickness (μ)	:	37.5 or 25
Type of pouch	:	Pillow pouch
Seal Width	:	5 mm (Minimum)

Note:

1. Tolerance

a) Permissible Lower Level : Polyethylene film (-1.0%)

Polypropylene film (-1.0%)

b) Upper Level

A higher specification (positive tolerance) always could be acceptable but however should not lead to high rigidity, flex crack or reduced seal strength. A higher specification may add to the cost.

2. The material could be transparent/opaque coloured as per the requirements of the importer.

3. The material used shall be food grade and pass the prescribed Indian Standard / Standards if any and as demanded by the importing countries.

4. Printing requirements shall conform to as prescribed by the importing countries.

5. General Observations:

a) The pouches shall be clean and without any foreign particle.

b) The seal width shall be minimum 5 mm, particularly the top seal (for filled pouches)

- c) The pouches shall be either reverse or surface printed. In case of surface print, the print shall be compatible with the product and shall not lift or smudge. The print shall be legible and easy to read.

B. Pastic Punnet (250 gms, 500 gms.)

Material : Food grade PET (Polyethylene Terephthalate)

Design : As per prototype

Note: The lid should sit firmly on the tray and should be lockable type.

C. Stretch Film

Material : Food grade, Odourless, Stretchable

LDPE : (Low density polyethylene)

or

LLDPE : (Linear low density polyethylene)

or

PVC : (Polyvinyl chloride) film.

Thickness (μ) : 15.00

D. EPS Tray

Material of construction : (EPS) Expanded Polystyrene

Density (g/cc) : 0.08

Thickness : Not more than 5 mm

ANNEXURE XII- A

DIMENSIONS OF TRANSPORT PACK FOR CONSUMER PACKS

**PRODUCT :SNOW PEAS (*Pisum sativum var. saccharatum*)/
SNAP PEAS (*Pisum sativum var. macrocarpon*)**

NO.	TYPE OF CONSUMER PACK	CAPACITY OF CONSUMER PACK	EXTERNAL DIMENSIONS OF TRANSPORT PACK (mm) L x B x H
1.	Flexible Plastic Pouch	250 grams	500 x 400 x 140
		500 grams	500 x 400 x 140
2.	Plastic Punnet with lid	250 grams	500 x 400 x 95
		500 grams	500 x 400 x 135
3	EPS tray stretch wrapped	250 grams	500 x 300 x 100

ANNEXURE XII- B

DIMENSIONS OF TRANSPORT PACK FOR CONSUMER PACKS

PRODUCT : CHERRY TOMATOES (*Solanum lycopersicum var. cerasiforme*)

NO.	TYPE OF CONSUMER PACK	CAPACITY OF CONSUMER PACK	EXTERNAL DIMENSIONS OF TRANSPORT PACK (mm) L x B x H
1.	Flexible Plastic Pouch	250 grams	500 x 400 x 95
2.	Plastic Punnet with lid	250 grams	500 x 400 x 80
3.	EPS tray stretch wrapped	250 grams	500 x 400 x 95

ANNEXURE XII- C

DIMENSIONS OF TRANSPORT PACK FOR CONSUMER PACKS

PRODUCT :ASPARAGUS (*Asparagus officinalis*)

NO.	TYPE OF CONSUMER PACK	CAPACITY OF CONSUMER PACK	EXTERNAL DIMENSIONS OF TRANSPORT PACK (mm) L x B x H
1.	Flexible Plastic Pouch	200 grams	400 x 300 x 60
2.	EPS tray stretch wrapped	400 grams	500 x 400 x 100
3.	Stretch wrapped in bunches	200 grams	380 x 240 x 80

ANNEXURE XII- D

DIMENSIONS OF TRANSPORT PACK FOR CONSUMER PACKS

PRODUCT :Grapes (*Vitis vinifera*)

NO.	TYPE OF CONSUMER PACK	CAPACITY OF CONSUMER PACK	EXTERNAL DIMENSIONS OF TRANSPORT PACK (mm) L x B x H
1.	Plastic Punnet with lid	500 grams	600 x 400 x 95

ANNEXURE XIII

PLACEMENT OF CONSUMER PACKS IN TRANSPORT PACKS

SR NO.	TYPE OF COMSUMER PACK	CAPACITY OF CONSUMER PACK	DIMENSIONS OF FILLED PACK	EXTERNAL DIMENSIONS OF THE BOX L x b x h(mm)	PLACEMENT PATTERN	NET WEIGHT OF CONTENTS (kg)
1.	Snow peas/ Snap peas					
	Flexible Plastic Pouch	250 grams	190 x 60 x 60	500 x 400x140	3b x 2l x 2h	3
		500 grams	245 x 195 x 60	500 x 400 x 140	21 x 2b x 2 h	4
	Plastic Punnet with lid	250 grams	195 x 120 x 75	500 x 400 x 95	4b x 21 x l h	2
	EPS Tray stretch wrapped	500 grams	195 x 120 x 110	500 x 400 x 135	4bx 21 x l h	4
		250 grams	245 x 145 x 40	500 x 300 x 100	2 l x 2 b x 2 h	2
2.	Cherry Tomatoes					
	Flexible Plastic Pouch	250 grams	165 x 130 x 30	500 x 400x95	31 x 2b x 2h	3
	Plastic Punnet with lid	250 grams	195 x 120 x 60	500 x 400 x 80	4b x 21 x l h	2
	EPS Tray stretch wrapped	250 grams	245 x 125 x 35	500 x 400 x 95	2 l x 2 b x 2 h	2
3.	Asparagus					
	Flexible Plastic Pouch	200 grams	180 x 145 x 20	400 x 300 x 60	2l x 2b x 2h	1.6
	EPS Tray stretch wrapped	400 grams	245 x 300 x 100	500 x 300 x 100	2l x 2b x 2h	3.2
	Stretch wrapped in bunches	200 grams	360 x 65 x 35	380 x 240 x 80	1l x 4b x 2h	1.6
4	Grapes					
	Plastic Punnet with lid	500 grams	190 x 115 x 80	600 x 400 x 95	5b x 21 x l h	10

ANNEXURE XIV- A

SPECIFICATION DETAILS OF TRANSPORT PACK FOR CONSUMER PACKS

PRODUCT : SNOW PEAS (*Pisum sativum var. saccharatum*)/

SNAP PEAS (*Pisum sativum var. macrocarpon*)

TYPE OF CONSUMER PACK : FLEXIBLE PLASTIC POUCH

CAPACITY OF CONSUMER PACK : 250 grams & 500 grams

MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	500 x 400 x 140	500 x 400 x 140
STYLE OF BOX * *	RSC - 0201	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing
EDGE CRUSH (KGF)(MIN)	30.00	30.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60
NO. OF VENTILATION HOLES	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0
TWO SIDES EACH	3	3
TWO ENDS EACH	1	1
TOP & BOTTOM EACH	4	4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XIV- B

SPECIFICATION DETAILS OF TRANSPORT PACK **FOR CONSUMER PACKS**

**PRODUCT : SNOW PEAS (*Pisum sativum var. saccharatum*)/
SNAP PEAS (*Pisum sativum var. macrocarpon*)**

TYPE OF CONSUMER PACK :PLASTIC PUNNET WITH LID

CAPACITY OF CONSUMER PACK: 250 grams & 500 grams

MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm) 250 grams 500 grams	 500 x 400 x 95 500 x 400 x 135
STYLE OF BOX * *	One piece tuck-in-type
NO. OF PLIES	3.0
TYPE OF FLUTES	B (Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0
NO. OF PIECES PER BOX	One
MANUFACTURE'S JOINT	By gluing
EDGE CRUSH (KGF)(MIN)	30.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	19.0
DIAMETER (MM) OF POSITION OF HOLES	As shown in drawing No.4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XIV- C

SPECIFICATION DETAILS OF TRANSPORT PACK FOR CONSUMER PACKS

**PRODUCT : SNOW PEAS (*Pisum sativum var. saccharatum*)/
SNAP PEAS (*Pisum sativum var. macrocarpon*)**

TYPE OF CONSUMER PACK :EPS TRAY STRETCH WRAPPED

CAPACITY OF CONSUMER PACK: 250 grams

MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm)	500 x 300 x 100
STYLE OF BOX * *	a) Telescopic (0306) b) Telescopic (0312)
NO. OF PLIES	Lid - 3 Tray - 3
TYPE OF FLUTES	Lid : B (Narrow) Tray : B (Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two
MANUFACTURE'S JOINT	By gluing
EDGE CRUSH (KGF)(MIN)	30.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0
TWO SIDES EACH	3
TWO ENDS EACH	1
TOP & BOTTOM EACH	4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used

ANNEXURE XIV- D

SPECIFICATION DETAILS OF TRANSPORT PACK FOR CONSUMER PACKS

PRODUCT : CHERRY TOMATOES (*Solanum lycopersicum var. cerasiforme*)

TYPE OF CONSUMER PACK : FLEXIBLE PLASTIC POUCH

CAPACITY OF CONSUMER PACK : 250 grams

MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	500 x 400 x 95	500 x 400 x 95	500 x 400 x 95	500 x 400 x 95
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
EDGE CRUSH (KGF) (MIN)	30.00	30.00	30.00	30.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
NO. OF VENTILATION HOLES	16.0	16.0	16.0	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XIV- E

SPECIFICATION DETAILS OF TRANSPORT PACK
FOR CONSUMER PACKS

PRODUCT :CHERRY TOMATOES(*Solanum lycopersicum var. cerasiforme*)

TYPE OF CONSUMER PACK : PLASTIC PUNNET WITH LID

CAPACITY OF CONSUMER PACK: 250 grams

MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm)	500 x 400 x 80
STYLE OF BOX * *	One piece tuck-in-type
NO. OF PLIES	3.0
TYPE OF FLUTES	B (Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0
NO. OF PIECES PER BOX	One
MANUFACTURE'S JOINT	By gluing
EDGE CRUSH (KGF)(MIN)	25.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	19.0
DIAMETER (MM) OF POSITION OF HOLES	As shown in drawing No.4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XIV- F

SPECIFICATION DETAILS OF TRANSPORT PACK

FOR CONSUMER PACKS

PRODUCT : CHERRY TOMATOES (*Solanum lycopersicum var. cerasiforme*)

TYPE OF CONSUMER PACK : EPS TRAY STRETCH WRAPPED

CAPACITY OF CONSUMER PACK : 250 grams

MATERIAL OF CONSTRUCTION *	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
EXTERNAL DIMENSIONS (mm)	500 x 400 x 95	500 x 400 x 95	500 x 400 x 95	500 x 400 x 95
STYLE OF BOX * *	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
NO. OF PLIES	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
TYPE OF FLUTES	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
DIRECTION OF FLUTES	Vertical	Vertical	Vertical	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0	20.0	20.0	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two	Not more than two	Not more than two	Not more than two
MANUFACTURE'S JOINT	By gluing	By gluing	By gluing	By gluing
EDGE CRUSH (KGF) (MIN)	30.00	30.00	30.00	30.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350	350	350	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60	60	60	60
DIAMETER (MM) OF POSITION OF HOLES	20.0	20.0	20.0	20.0
TWO SIDES EACH	3	3	3	3
TWO ENDS EACH	1	1	1	1
TOP & BOTTOM EACH	4	4	4	4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XIV- G

SPECIFICATION DETAILS OF TRANSPORT PACK

FOR CONSUMER PACKS

PRODUCT : ASPARAGUS (*Asparagus officinalis*)

TYPE OF CONSUMER PACK : FLEXIBLE PLASTIC POUCH

CAPACITY OF CONSUMER PACK: 200 grams

MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm)	400 x 300 x 60
STYLE OF BOX **	Telescopic (0300)
NO. OF PLIES	3.0
TYPE OF FLUTES	B (Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0
NO. OF PIECES PER BOX	Not more than two
MANUFACTURE'S JOINT	By gluing
EDGE CRUSH (KGF)(MIN)	25.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350
COBB (30 MINUTES) *** (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	19.0
DIAMETER (MM) OF POSITION OF HOLES	As shown in drawing No. 4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XIV- H

SPECIFICATION DETAILS OF TRANSPORT PACK

FOR CONSUMER PACKS

PRODUCT : ASPARAGUS (*Asparagus officinalis*)

TYPE OF CONSUMER PACK : EPS TRAY STRETCH WRAPPED

CAPACITY OF CONSUMER PACK: 400 grams

MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm)	500 x 300 x 100
STYLE OF BOX * *	a) Telescopic (0306) b) Telescopic (0312)
NO. OF PLIES	Lid - 3 Tray - 3
TYPE OF FLUTES	Lid : B (Narrow) Tray : B (Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two
MANUFACTURE'S JOINT	By gluing
EDGE CRUSH (KGF)(MIN)	25.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0
TWO SIDES EACH	3
TWO ENDS EACH	1
TOP & BOTTOM EACH	4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XIV- I

SPECIFICATION DETAILS OF TRANSPORT PACK **FOR CONSUMER PACKS**

PRODUCT : ASPARAGUS (*Asparagus officinalis*)

TYPE OF CONSUMER PACK : STRETCH WRAPPED IN BUNDLES

CAPACITY OF CONSUMER PACK: 200 grams

MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm)	380 x 240 x 80
STYLE OF BOX * *	Telescopic (0300)
NO. OF PLYS	Lid - 3 Tray - 3
TYPE OF FLUTES	Lid : B (Narrow) Tray : B (Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	Lid : 250/150/150 Tray : 250/150/150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	Lid : 11.0 Tray : 11.0
NO. OF PIECES PER BOX	Not more than two
MANUFACTURE'S JOINT	By gluing
EDGE CRUSH (KGF)(MIN)	30.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	16.0
DIAMETER (MM) OF POSITION OF HOLES	20.0
TWO SIDES EACH	3
TWO ENDS EACH	1
TOP & BOTTOM EACH	4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XIV- J

SPECIFICATION DETAILS OF TRANSPORT PACK
FOR CONSUMER PACKS

PRODUCT : GRAPES (*Vitis vinifera*)

TYPE OF CONSUMER PACK : PLASTIC PUNNET WITH LID

CAPACITY OF CONSUMER PACK: 500 grams

MATERIAL OF CONSTRUCTION *	Corrugated FibreBoard
EXTERNAL DIMENSIONS (mm)	620 x 410 x 95
STYLE OF BOX * *	One piece tuck-in-type
NO. OF PLIES	3.0
TYPE OF FLUTES	B (Narrow)
DIRECTION OF FLUTES	Vertical
GRAMMAGE (G/M SQ.) OUTER TO INNER (INDICATIVE)	250 / 150 / 150
BURST FACTOR OF PAPER (KRAFT) (MINIMUM)	20.0
BURSTING STRENGTH OF BOARD (KG/ CM.SQ)(MINIMUM)	11.0
NO. OF PIECES PER BOX	One
MANUFACTURE'S JOINT	By gluing
EDGE CRUSH (KGF)(MIN)	25.00
COMPRESSION STRENGTH OF BOX (KGF) (MINIMUM)	350
COBB (30 MINUTES) * * * (G /M SQ.) (MAXIMUM)	60
NO. OF VENTILATION HOLES	19.0
DIAMETER (MM) OF POSITION OF HOLES	As shown in drawing No. 4

* Outer ply of white duplex board or bleached kraft

** Or any other suitable style which provides equal strength and performance

*** Outer ply to be laminated or coated for water proofing

Note : Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

ANNEXURE XV

SPECIFICATION DETAILS OF PARTITIONS AND SEPARATOR PLATES

MATERIAL OF CONSTRUCTION	:	Corrugated Fibre Board
NO. OF PLIES	:	3
TYPE OF FLUTE	:	B (Narrow)
GRAMMAGE (g/m ²)	:	150/150/150
BURSTING STRENGTH (kg/cm.sq) (minimum)	:	5.00

ANNEXURE XVI

PALLETISATION DETAILS

TRANSPORT PACK FOR CONSUMER PACK

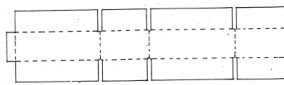
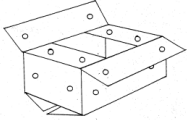
TYPE OF CONSUMER PACK	EXTERNAL DIMENSIONS OF THE BOX l x b x h (mm)	TYPE OF PALLET	NO. OF BOXES PER LAYER (ON BASE)	PLACEMENT PATTERN	BASE AREA UTILISATION (%)
SNOW PEAS / SNAP PEAS					
Flexible Plastic Pouch	500 x 400 x 140	IATA - A IATA - B EURO - A EURO - B	30 36 6 3	6(L) x 5(W) 6(L) x 6(W) 2(W) x 3(L) 3(W) x 1(L)	92 97 100 83
Plastic Punnet with lid	500 x 400 x 95	IATA - A IATA - B EURO - A EURO - B	30 36 6 3	6(L) x 5(W) 6(L) x 6(W) 2(W) x 3(L) 3(W) x 1(L)	92 97 100 83
	500 x 400 x 135	IATA - A IATA - B EURO - A EURO - B	30 36 6 3	6(L) x 5(W) 6(L) x 6(W) 2(W) x 3(L) 3(W) x 1(L)	92 97 100 83
EPS Tray Stretch Wrapped	500 x 300 x 95	IATA - A IATA - B EURO - A EURO - B	42 48 8 6	6(L) x 8(W) 6(L) x 8(W) 4(W) x 2(L) 4(W) x 1(L) + 2(l) x 1(W)	96 97 100 94
CHERRY TOMATOES					
Flexible Plastic Pouch	500 x 400 x 75	IATA - A IATA - B EURO - A EURO - B	30 36 6 3	6(L) x 5(W) 6(L) x 6(W) 2(W) x 3(L) 3(W) x 1(L)	92 97 100 83
Plastic Punnet with lid	500 x 400 x 80	IATA - A IATA - B EURO - A EURO - B	30 36 6 33	6(L) x 5(W) 6(L) x 6(W) 2(W) x 3(L) 3(W) x 1(L)	92 97 100 83

TYPE OF CONSUMER PACK	EXTERNAL DIMENSIONS OF THE BOX l x b x h (mm)	TYPE OF PALLET	NO. OF BOXES PER LAYER (ON BASE)	PLACEMENT PATTERN	BASE AREA UTILISATION (%)
EPS Tray Stretch Wrapped	500 x 400 x 95	IATA - A IATA - B EURO - A EURO - B	30 36 6 3	6(L) x 5(W) 6(L) x 6(W) 2(W) x 3(L) 3(W) x 1(L)	92 97 100 83
ASPARAGUS					
Flexible Plastic Pouch	400 x 300 x 60	IATA - A IATA - B EURO - A EURO - B	50 60 9 8	10(W) x 5(L) 10(W) x 5(L) 3(L) x 3(W) 4(W) x 2(L)	92 97 91 100
EPS Tray Stretch Wrapped	500 x 300 x 100	IATA - A IATA - B EURO - A EURO - B	42 48 8 6	6(L) x 8(W) 6(L) x 8(W) 4(W) x 2(L) 4(W) x 1(L)	96 97 100 94
Stretch Wrapped in Bunches	380 x 240 x 80	IATA - A IATA - B EURO - A EURO - B	42 48 8 6	8(L) x 8(W) 8(L) x 10(W) 3(L) x 2(W) 5(W) x 2(L)	89 99 91 95
GRAPES					
Plastic Punnet with lid	600 x 400 x 95	IATA - A IATA - B EURO - A EURO - B	25 25 4 4	5(L) x 5(W) 5(L) x 5(W) 2(L) x 2(W) 2(L) x 2(W)	92 92 100 80

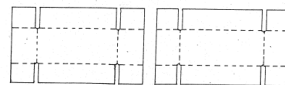
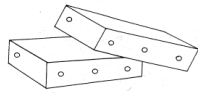
DRAWINGS

DIRECT BULK PACK FOR FRUITS & VEGETABLES

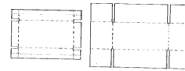
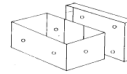
CFB BOX RSC TYPE (0201)



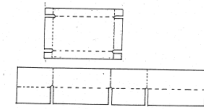
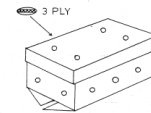
CFB BOX TELESCOPIC TYPE (0300)



CFB BOX TELESCOPIC TYPE (0306)

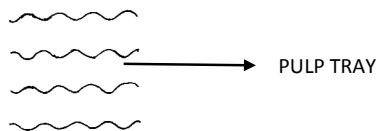


CFB BOX TELESCOPIC TYPE (0312)

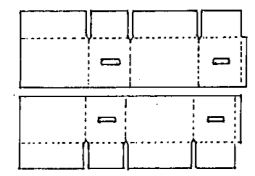
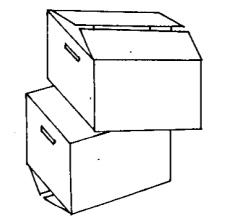


DRAWING NO.1

DIRECT BULK PACK FOR ORANGES (MOULDED PULP



CFB BOX TELESCOPIC TYPE (0320)



STYLE OF BOX : FULL TELESCOPIC

PLACEMENT OF

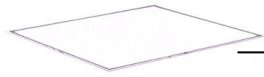
ORANGES : 5 x 4 x 4

NO. OF ORANGES : 80 (15 KG APPROX.)

EXT. DIMENSION : 520 x 315 x 300

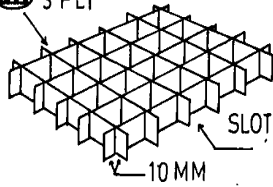
DRAWING NO. 2

DIRECT BULK PACK FOR ORANGES (SLOTTED PARTITION)



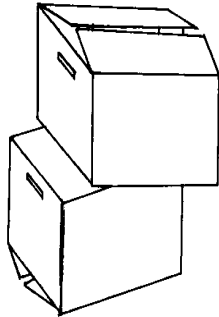
CFB PLATE

3 PLY

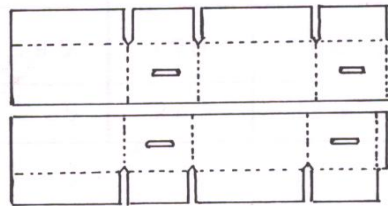


SLOTTED PARTITION

10 MM



CFB BOX TELESCOPIC TYPE (0320)



STYLE OF BOX : FULL TELESCOPIC

PLACEMENT OF

ORANGES : 5 x 4 x 4

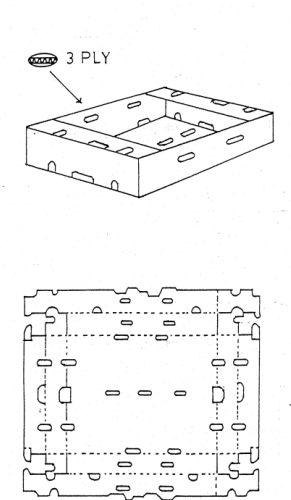
NO. OF ORANGES : 80 (15 KG
APPROX.)

DRAWING NO. 3

TRANSPORT PACK FOR COMSUMER PACK (PLASTIC PUNNET

STYLE OF BOX : ONE PIECE TUCK – IN – TYPE BOX

PRODUCTS : SNOW PEAS/ SNAP PEAS / CHERRY TOMATOES/ GRAPES



PRODUCT	CAPACITY OF CONSUMER PACK	NO. OF PUNNETS	EXTERNAL DIMENSIONS OF THE TRANSPORT PACK (mm)
Snow Peas/ Snap Peas	250 grams	8 (2 kg)	500 x 400 x 95
	500 grams	8 (4 kg)	500 x 400 x 135
Cherry Tomatoes	250 grams	8 (2 kg)	500 x 400 x 80
Grapes	500 grams	10 (5 kg)	600 x 400 x 95

DRAWING NO. 4

PHOTOGRAPHS

APPENDIX I

PRESENT PACKS FOR FRUITS AND VEGETABLES EVALUATED IN THE LABORATORY



PHOTOGRAPH-1



PHOTOGRAPH-2



PHOTOGRAPH -3



PHOTOGRAPH - 4



PHOTOGRAPH - 5



PHOTOGRAPH - 6



PHOTOGRAPH - 7



PHOTOGRAPH - 8



PHOTOGRAPH - 9



PHOTOGRAPH - 10



PHOTOGRAPH - 11



PHOTOGRAPH - 12

APPENDIX II

BOX STYLES CONSIDERED FOR DEVELOPMENT OF BULK PACKS (CFB) FOR FRUITS AND VEGETABLES



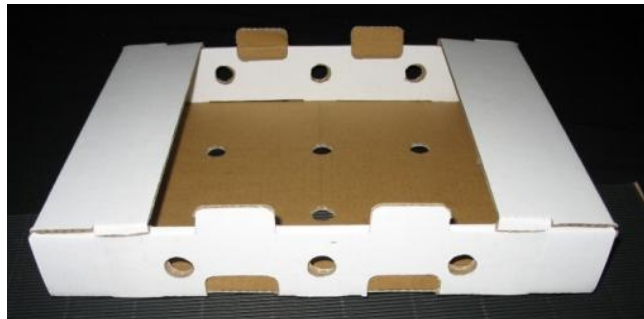
PHOTOGRAPH – 13



PHOTOGRAPH - 14



PHOTOGRAPH – 15



PHOTOGRAPH - 16

APPENDIX III

DEVELOPED DIRECT BULK PACK FOR BITTER GOURD



PHOTOGRAPH – 17, RSC STYLE (0201)



PHOTOGRAPH – 18 TELESCOPIC STYLE (0306)



PHOTOGRAPH – 19 TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR TINDOLA



PHOTOGRAPH – 20, RSC STYLE (0201)



PHOTOGRAPH – 21, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 22, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR KANTOLA



PHOTOGRAPH – 23, RSC STYLE (0201)



PHOTOGRAPH – 24, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 25, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR BRINJAL (SMALL)



PHOTOGRAPH – 26, RSC STYLE (0201)



PHOTOGRAPH – 27, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 28, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR BRINJAL (BIG)



PHOTOGRAPH – 29, RSC STYLE (0201)



PHOTOGRAPH – 30, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 31, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR GREEN CHILLIES



PHOTOGRAPH – 32, RSC STYLE (0201)



PHOTOGRAPH – 33, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 34, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR PAPADI



PHOTOGRAPH – 35, RSC STYLE (0201)



PHOTOGRAPH – 36, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 37, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR BABY CORN



PHOTOGRAPH – 38, RSC STYLE (0201)



PHOTOGRAPH – 39, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 40, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR POTATOES



PHOTOGRAPH – 41, RSC STYLE (0201)



PHOTOGRAPH – 42, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 43, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR CUSTARD APPLE)



PHOTOGRAPH – 44, RSC STYLE (0201)



PHOTOGRAPH – 45, TELESCOPIC STYLE (0306) WITH PARTITIONS



PHOTOGRAPH – 46, RSC STYLE (0201) WITH PARTITIONS

DEVELOPED DIRECT BULK PACK FOR POMOGRENATE



PHOTOGRAPH – 47, RSC STYLE (0201)



PHOTOGRAPH – 48, TELESCOPIC STYLE (0306)

DEVELOPED DIRECT BULK PACK FOR ORANGES



**PHOTOGRAPH – 49
TELESCOPIC STYLE (0320) WITH
SLOTTED PARTITIONS**



**PHOTOGRAPH – 50
TELESCOPIC STYLE (0320)
WITH PULP TRAYS**

DEVELOPED DIRECT BULK PACK FOR GRAPES& BANANA



PHOTOGRAPH – 51
RSC STYLE (0201)



PHOTOGRAPH – 52
TELESCOPIC STYLE (0306)



PHOTOGRAPH – 53
TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR ALPHONSO MANGOES



PHOTOGRAPH – 54, RSC STYLE (0201)



PHOTOGRAPH – 55, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 56, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR KESAR MANGOES



PHOTOGRAPH – 57 RSC STYLE (0201)



PHOTOGRAPH – 58, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 59, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR DUSHERI MANGOES



PHOTOGRAPH – 60 RSC STYLE (0201)



PHOTOGRAPH – 61, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 62, TELESCOPIC STYLE (0300)

DEVELOPED DIRECT BULK PACK FOR DUSHERI MANGOES



PHOTOGRAPH – 63 RSC STYLE (0201)



PHOTOGRAPH – 64, TELESCOPIC STYLE (0306)



PHOTOGRAPH – 65, TELESCOPIC STYLE (0300)

APPENDIX IV
BOX STYLE CONSIDERED FOR DEVELOPMENT OF BULK PACKS (EPS)
FOR FRUITS AND VEGETABLES



PHOTOGRAPH – 66

DEVELOPED DIRECT BULK PACK (EXPANDED POLYSTYRENE) FOR
PAPADI/ OKRA



PHOTOGRAPH – 67



PHOTOGRAPH – 68

**DEVELOPED DIRECT BULK PACK (EXPANDED POLYSTYRENE) FOR
TINDOLA / BRINJAL**



PHOTOGRAPH – 69



PHOTOGRAPH – 70



PHOTOGRAPH – 71

**DEVELOPED DIRECT BULK PACK (EXPANDED POLYSTYRENE) FOR
BITTER GOURD / GREEN CHILLIES**



PHOTOGRAPH – 72



PHOTOGRAPH – 73

**DEVELOPED DIRECT BULK PACK (EXPANDED POLYSTYRENE) FOR
CUSTARD APPLE/ GRAPES**



PHOTOGRAPH – 74



PHOTOGRAPH – 75

APPENDIX V
JUTE / LENO / NET BAGS CONSIDERED FOR DIRECT
BULK PACK OF VEGETABLES



PHOTOGRAPH – 76

DEVELOPED DIRECT BULKPACK FOR YAM - JUTE BAG



PHOTOGRAPH – 77

DEVELOPED DIRECT BULK PACK FOR YAM - NET BAG



PHOTOGRAPH – 78

DEVELOPED DIRECT BULK PACKFOR ARBI - JUTE BAG



PHOTOGRAPH – 79

DEVELOPED DIRECT BULKFOR ARBI - NET BAG



PHOTOGRAPH – 80

DEVELOPED DIRECT BULK PACKFOR POTATOES - JUTE BAG



PHOTOGRAPH – 81

DEVELOPED DIRECT BULK PACK FOR POTATOES - LENO BAG



PHOTOGRAPH – 82

DEVELOPED DIRECT BULK PACK FOR ONIONS – LENO BAG / JUTE BAG



PHOTOGRAPH – 83

APPENDIX VI

DEVELOPED CONSUMER PACKS - SNOW PEAS / SNAP PEAS



**PHOTOGRAPH – 84
FLEXIBLE PLASTIC POUCH**



**PHOTOGRAPH – 85
PLASTIC PUNNET WITH LID**



**PHOTOGRAPH – 86
EPS TRAY STERTCH WRAPPED**

DEVELOPED CONSUMER PACKS - CHERRY TOMATOES



PHOTOGRAPH – 87
FLEXIBLE PLASTIC POUCH



PHOTOGRAPH – 88
PLASTIC PUNNET WITH LID



PHOTOGRAPH – 89
EPS TRAY STRETCH WRAPPED

DEVELOPED CONSUMER PACKS- ASPARAGUS



**PHOTOGRAPH – 90
EPS TRAY STERTCH WRAPPED**



**PHOTOGRAPH – 91
STRETCH WRAPPED IN BUNCHES**

**DEVELOPED TRANSPORT PACK FOR CONSUMER PACK –
CHERRY TOMATOES & GRAPES**



PHOTOGRAPH – 92



PHOTOGRAPH – 93