

# DRILLTEC RAP™

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The RAP™ packaging system was introduced by Drilltec in 1982 as a new concept for the handling, transportation and storage of pipe.

Over the years, the design has been updated to take advantage of the newest technology. Today the RAP™ packaging system is the reference in the industry. The RAP™ packaging system is the strongest and most affordable reusable pipe packaging system available on the market.

The RAP™ packaging system is constructed with high density polyethylene segments reinforced with galvanized rectangular steel tubing.

Each joint of pipe is placed in its own matching diameter recess. This feature reduces the risk of corrosion and impact damage.

After assembly, the package is secured by bolts linking both ends of the solid bars which extend through the bottom and top segments of each frame.

The package is secured by applying a make-up torque of 70 ft-lb (95 Nm) to the bolts using a properly calibrated torque wrench, not by estimation.

The package is lifted by either forklift or slings.

The unique design of the RAP™ packaging system allows the packages to interlock for optimum safety when stacked.

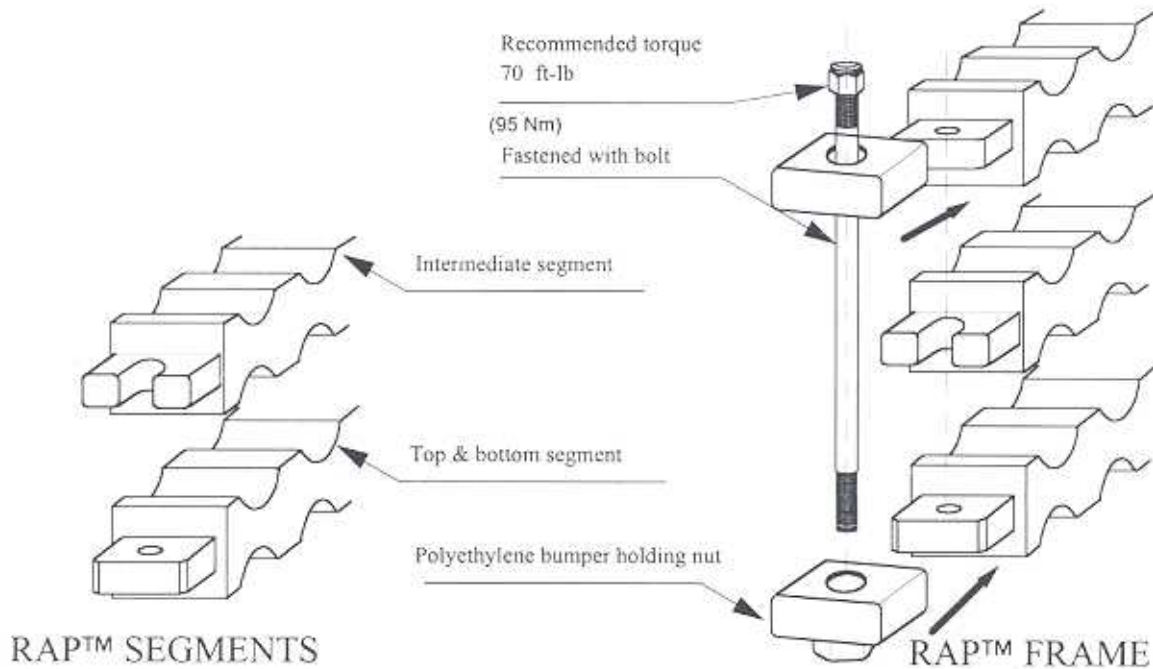
The RAP™ packaging system is available for tubular sizes ranging from 2 3/8" through 9 5/8".



## Assembly is Fast and Efficient



The purpose of pipe packaging systems is to secure the pipe in packages for easier and safer handling, transport and storage between the pipe mill and the end destination.



## 1 - Description of the RAP™ System

The RAP™ packaging system consists of an assembly of High Density Polyethylene beams (or segments) reinforced by encapsulated galvanized rectangular steel tubing.

They are designed to prevent contact between the individual joints of pipe and other metallic objects.

The segments contain a specific number of moulded recesses which match the pipe diameter to be packaged. Spacing of the recesses is designed to accommodate the size of all known couplings.

All intermediate segments for a given pipe diameter are identical and are fully interchangeable.

Top and Bottom segments are identical and they are easily identified since they incorporate a solid galvanized steel bar fitted with a bolt attachment at each end.

The segments are placed in a vertical plane between the layers of pipe to maintain separation. Each group of segments in the same plane is designated by the term "frame".

After assembly of the package, the frames are held together by two bolts.

Four frames are required for optimum stability of the pipe package. (See assembly instructions for recommended spacing.)

## 2 - Safety -

After assembly, the package rests on bottom segments which have pipe recesses facing downward; when packages are stacked, the bottom segments interlock with the pipe of the lower package for optimum stability.

## 3 - Application -

The RAP™ system is available for all API Tubing and Casing sizes from 2 3/8" through 9 5/8".

It is recommended for packaging of any pipe to be transported by either land or sea and whose final destination is either onshore or offshore.

It is also recommended for packaging corrosion sensitive pipe such as chrome alloy material.

## 4 - Operation -

The RAP™ system is designed to form packages of approximately 6 metric tonne for the most popular nominal weights of each pipe size.

The RAP™ system packages can be lifted by forklift, slings or endless slings.

They can be stacked as high as practicable in accordance with local safety considerations.

The RAP™ system packages are 800 mm (31.50 inch) wide. Three packages can fit side by side on a standard truck bed.

## 5 - Reclamation and recycling -

RAP™ segments can be reused many times.

Plastic and steel reinforcement can be separated for recycling at the end of the life cycle of the segments.

Contact your local Drilltec office for information on worldwide reclamation services.