



## DUSTSCREW (Spiral Waste Bin)

Common-Refuse-Chute System for high rise apartments

Over 1,800 units of dust-screws are installed into all new Singapore Housing Board apartments since 1990 . Prior to the implementation of Dust-screws , many foreign workers were employed to collect the black bins manually . Waste were exposed and hygiene standards were compromised . The foreign workers also added to our social cost . With the Dust-screws, waste handling is efficient & almost one-man operated, hence operating cost were brought down tremendously and hygiene standard raised.



The Dust-screw bin center is so inconspicuous & hygienic that the designer no longer have to worry where the bin-center is located.

The above bin centers of these public-apartment blocks in Jurong (Singapore) faces the main road just opposite a food center .



With the roller-shuttle drawn down, one can hardly tell (nor smell) that within, stores the refuse collected from more than 150 families .

# Dustscrew Refuse Handling Equipment

## 21st century waste handling system for public housing



Public Housing in the 21st Century is taking advantage of the free air-space by building higher apartment blocks. This apartments blocks in Jalan Membina (Singapore) completed around 2002 is 30 storeys high with 4 dwelling units on each level sharing 1 common refuse chute.



116 dwelling units sharing a 4.3 cubic meter dust-screw (the ground or 1st floor is a void deck). The cleaners engaged by the town council would wash and maintain the bin-center free from rodents and disease-carrying pest.

The new refuse chutes even come with an auto-flushing and pesticide spray (controls are located in the bin-center).



Residents throw their refuse into the above "fixed-volume" foot-operated stainless steel hopper. The hopper is designed such that no bulky refuse is thrown into the chute (probably only 3 or 4 average-sized telephone directories can fit into the hopper).

Bulky items like television set, steel-frame chair or micro-wave oven may jam the dustscrew.



It is easy to ruin an otherwise beautiful living environment with a poorly designed waste handling system.