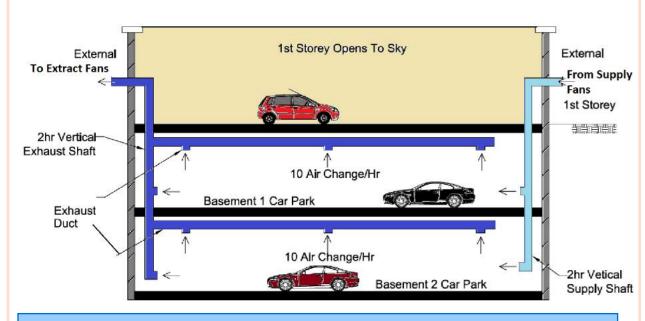


Table 10.11.: Mechanical Smoke Purging Using Dedicated Ducting

ITEMS	REQUIREMENTS
6. SMOKE SCREENS	 i. Listed and approved smoke curtains shall be provided to enhance the performance of the mechanical smoke purging system, where engineering analysis demands the restriction of volume to achieve 10 air changes per hour. ii. All smoke curtains unless permanently fixed in a position, shall be brought into the position automatically to provide adequate smoke-tightness and effective smoke reservoir depth. iii. Smoke screens shall be located strategically to channel and create smoke reservoir towards the extraction outlets.
7. ACTIVATION	 i. The mechanical smoke exhaust fans shall be interfaced with a cross zoned Fire detection and a sprinkler activation. ii. Virtual zoning shall be established in the area with fire detection, alarm or sprinkler or deluge system activation which shall be configured to trigger the smoke extraction so as to achieve 10 air-change per hour in that particular virtual zone. iii. The smoke extract system zoning shall be permitted to be determined by the engineered design and coordinated with the sprinkler or deluge system zone system design. iv. The mechanical smoke exhaust fans shall also be operable manually with a manual overriding switch.
8. CONTROL	 i. The mechanical smoke exhaust fan system shall have a dedicated smoke control panel (SCP), interfaced with a fire detection and alarm system and a sprinkler activation. ii. A smoke extract fan layout clearly depicting the layout of mechanical smoke fans, their identification physical and virtual zones and respective manual switches shall be provided near the entrance or an approved location beside the SCP. iii. Visual indication of the operation status of the smoke extract system shall also be provided with the SCP, as required by Table 10.1.11.



Schematic 10.28.: Typical Mechanical Smoke Purging Using Dedicated Ducting

