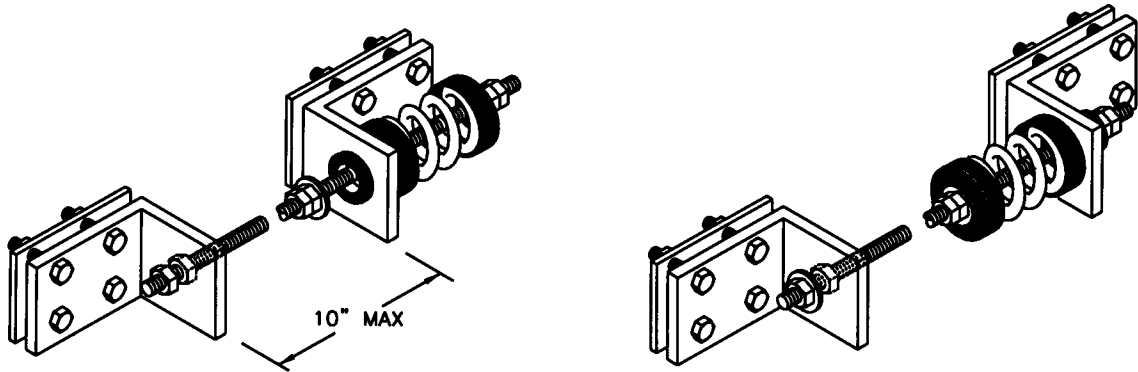
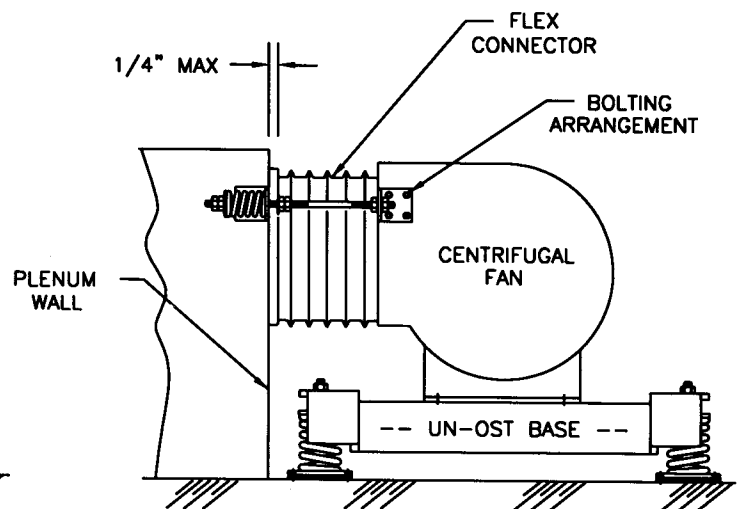
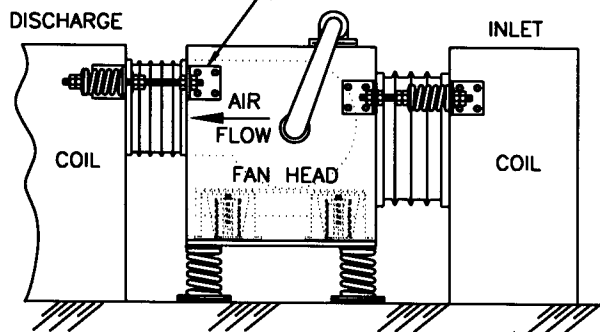
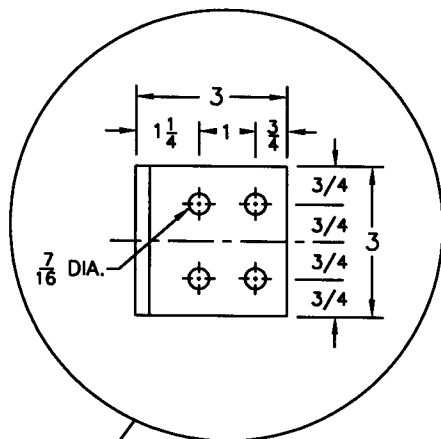


TYPE "HTR-1" HORIZONTAL THRUST RESTRAINT



HTR-1 (Fig. 66)

| Fig. No. | MODEL NUMBER | COLOR CODE | THRUST PER PAIR | RATED DEFL. | |
|----------|--------------|------------|-----------------|-------------|------|
| 66 | HTR-1 | F22 | RED | 200 # | 1.0" |
| | | F23 | WHITE | 300 # | |
| | | F24 | GREEN | 420 # | |
| | | F25 | BLUE | 600 # | |
| | | F26 | ORANGE | 800 # | |
| | | F27 | BROWN | 1000 # | |



THRUST RESTRAINTS ARE REQUIRED TO LIMIT EXCESS HORIZONTAL MOVEMENT OF A SPRING MOUNTED FAN SYSTEM DUE TO THRUST CREATED BY OPERATING STATIC PRESSURE. THEY ARE RECOMMENDED WHEN AIR THRUST EXCEEDS 10% OF THE EQUIPMENT WEIGHT AND MASS CANNOT BE ADDED TO THE SYSTEM TO INCREASE RESISTANCE OF THE SPRING CONSTANT.

THE RESTRAINTS AS PICTURED ABOVE ARE PRECOMPRESSED IN THE FACTORY AND ADJUSTED IN THE FIELD TO ALLOW FOR A MAXIMUM OF 1/4" MOVEMENT DURING START UP AND STOPPING OF THE FAN.

THE THRUST RESTRAINTS ARE INSTALLED IN PAIRS ACROSS THE DISCHARGE FLEXIBLE CONNECTION OF THE FAN. ONE END IS ATTACHED TO THE FAN AND THE OTHER END IS NORMALLY ATTACHED TO A SOLID MOUNTED DUCT, PLENUM OR COIL, ETC.

THE FOLLOWING FORMULA IS USED TO CALCULATE THE THRUST FORCES TO DETERMINE THE NEED AND LOADING OF THE RESTRAINTS.

$$\text{THRUST} = \text{STATIC PRESSURE} \times \text{OUTLET AREA OF DISCHARGE (IN SQ. FT.)} \times 5.2 \text{ LBS SQ. FT.}$$