

G IN POLE

- ① MINIMUM DISTANCE FROM POLE HEEL TO BACK GUY ANCHORAGE

$$\text{POLE LENGTH} \times 1.5$$

- ② MAXIMUM FORWARD LEAN OF POLE

$$\text{POLE LENGTH} \div 10$$

- ③ TOTAL HEAD LOAD

LOAD & LOAD IN THE LEAD ROPE

- ④ COMPRESSION LOAD

$$\text{TOTAL HEAD LOAD} \times 1.125$$

- ⑤ TENSION IN THE BACK GUY

$$\text{COMPRESSION LOAD (IN KG)} \div 8$$

- ⑥ DIA OF FSWR

$$\text{TENSION (IN KG)} \div 8 = \sqrt{\quad}$$

FLYING FOX

- ① MAXIMUM SAG

$$\text{SPAN DIST} \div 20$$

- ② ROPE TENSION

$$(\text{LOAD} \times \text{SPAN}) \div (4 \times \text{SAG})$$

- ③ ROPE DIA

$$\text{ROPE TENSION KG} \div 8 = \sqrt{\quad}$$

SPAN LINE

- ① TENSION

$$(\text{LOAD} + \text{LIFTING GEAR} \times \text{SPAN}) \div (4 \times \text{SAG})$$

SUSPENDED SCAFFOLD

① MAX ROPE TENTION

$$(\text{HOIST CAPACITY} \times 1.25) + \text{ROPE WEIGHT}$$

② MIN GUARANTEED BREAKING LOAD OF SUSPENSION ROPE

$$\text{HOIST CAPACITY} \times \text{SAFETY FACTOR (10)}$$

③ NUMBER OF COUNTERWEIGHTS PER NEEDLE

STEP ONE

$$\text{LOAD X OUTBOARD} \div \text{INBOARD} = \text{COUNTER BALANCE WEIGHT REQ}$$

STEP TWO

$$\text{COUNTER BAL WEIGHT} \times \text{SAFETY FACTOR (3)} = \text{TOTAL WEIGHT}$$

STEP THREE

$$\text{TOTAL WEIGHT} \div \text{COUNTER WEIGHT} = \text{\# OF CW'S REQ}$$