Building Block $k = 1$

$$DT(i,x,1) =$$
if $i < x$:
new Node($i$, DT($i-1,x-1,0$), DT($i+1,x-1,1$))
else new Node($x$, DT($i-1,x-1,0$), $x$)

$DT(i-1,x-1,0) = i-1$
$DT(1,x,1)$

depth is $x$

highest safe rung