



1  
00:00:02,780 --> 00:00:01,250  
wanted to do for a while has

2  
00:00:05,900 --> 00:00:02,790  
demonstrated the effects of slender

3  
00:00:08,390 --> 00:00:05,910  
column column buckling especially in the

4  
00:00:10,879 --> 00:00:08,400  
context of World Trade Center seven now

5  
00:00:13,539 --> 00:00:10,889  
here I've got the equivalent of a column

6  
00:00:17,000 --> 00:00:13,549  
which is this piece of steel here and

7  
00:00:20,150 --> 00:00:17,010  
these things here are the equivalent of

8  
00:00:23,450 --> 00:00:20,160  
floors which are bracing the column on

9  
00:00:25,849 --> 00:00:23,460  
the sides at the column itself this

10  
00:00:29,060 --> 00:00:25,859  
piece of steel is free to move up and

11  
00:00:33,680 --> 00:00:29,070  
down and on the bottom it's simply

12  
00:00:37,010 --> 00:00:33,690  
resting on the concrete and so what I'm

13  
00:00:39,920 --> 00:00:37,020

gonna do is demonstrate how much for so

14

00:00:43,190 --> 00:00:39,930

I could put on top of this I'm gonna do

15

00:00:44,500 --> 00:00:43,200

is balance a plank on this and the other

16

00:00:47,029 --> 00:00:44,510

end of the plank will be on this

17

00:00:49,100 --> 00:00:47,039

stepladder and then I'm going to put my

18

00:01:01,360 --> 00:00:49,110

body weight on that and see if it

19

00:01:05,270 --> 00:01:01,370

supports it so that is quite easily

20

00:01:13,780 --> 00:01:05,280

supporting a very dynamic load for me

21

00:01:19,660 --> 00:01:13,790

and it is not buckling at all the

22

00:01:23,240 --> 00:01:19,670

demonstration is that this is not braced

23

00:01:25,100 --> 00:01:23,250

then it's actually it's extraordinarily

24

00:01:27,050 --> 00:01:25,110

weeks you can hardly sport any way to

25

00:01:31,039 --> 00:01:27,060

stall it but I can I can bend it with

26

00:01:32,840 --> 00:01:31,049

just perhaps ten pounds of weight and

27

00:01:35,690 --> 00:01:32,850

once it is buckles it's hardly supports

28

00:01:38,450 --> 00:01:35,700

any weight when it's in this structure

29

00:01:41,480 --> 00:01:38,460

here when it's actually raced along its

30

00:01:43,249 --> 00:01:41,490

length by the seven or flaws that we