

Working on a 2nd floor bathroom remodel. We removed a fiberglass jacuzzi tub and a two sink vanity from a master bathroom. We want to install a 400# cast iron pedestal tub and a 400# double, marble-topped vanity. In doing the renovation we've removed the old tile and will reinstall new tile. We also had a water leak so we pulled off the drywall on the ceiling below so we have access.

We have 2"x10" joists on 16" center. The joists span 14' but the bathroom is 8'4" wide to the wall. (see attached drawing). The joists run perpendicular to the length of the tub and vanity.

We figure the tub with water with a person will weight 1000#. There is a joist right under the middle of the tub. This joist was cut for the drain out of the removed jacuzzi. The new drain tub will also be centered on this joist so we are going to cut the joist and put a double header 2"x10" plumber box. The long centerline of the tub will 21" from the wall. The drain for the tub goes underneath and then down right under the lip of the tub which will be about 6" from the wall. There will be three joists under the weight of the tub.

The tub will be supported on three joists.

The vanity sits on four legs with two of the legs being between two of the joists holding up the tub and the other two legs being between two joists not related to the tub weight. The long centerline of the vanity is about 7'4" from the wall by the tub and about 6'6" from the end of the joist supported by the downstairs wall.

QUESTIONS:

1. We did the joist math and we can't support the weight of the tub (probably can support the vanity). We want to sister, scab, and/or block the three joists under the tub to strengthen everything. We don't have access to either end of the three joists though otherwise we'd just sister the three joists and call it a day.

WHAT CAN WE DO?

2. How can we do the analysis to show have confidence we met building code as well have constructed a long-lasting, non-deflecting joist system?





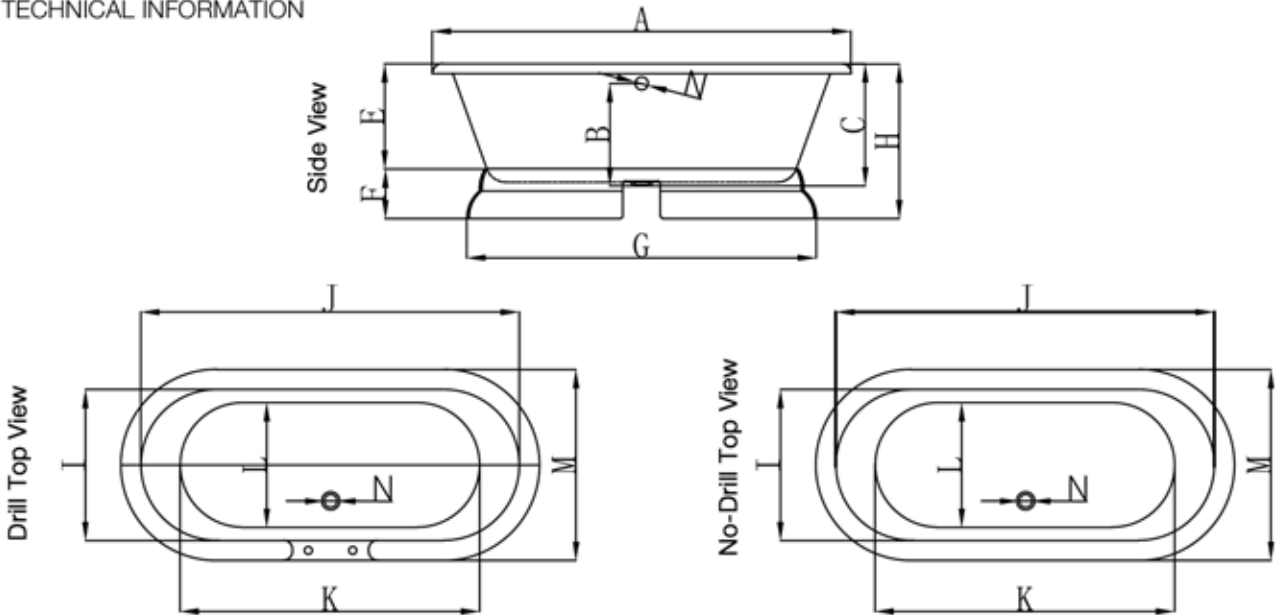


Double Ended Pedestal Tub by Randolph Morris

Cast Iron

Item #: RM60DE0PED, RM60DE7PED, RM66DE0PED & RM66DE7PED

TECHNICAL INFORMATION



DIMENSIONS (INCHES)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
60	60	15	18	-	15 ⁴ / ₅	8 ⁴ / ₅	48 ¹ / ₃	24	23 ⁴ / ₅	53 ⁴ / ₅	41 ¹ / ₃	18	30	2
66	66	15	18	-	15 ⁴ / ₅	8 ⁴ / ₅	54 ¹ / ₃	24	23 ⁴ / ₅	59 ² / ₃	47 ¹ / ₅	18	30	2

	60	66
EMPTY (LB)	372	297
FILLED (LB)	596	781
CAPACITY (GAL)	50	58
WATER DEPTH (IN)	15 ⁴ / ₅	15 ⁴ / ₅

Approximate Measurements
*Pedestal

All products and specifications are subject to change without notice. Randolph Morris is not responsible for typographical and/or dimensional errors. Typographical errors are subject to correction.

Note: Rough-in dimensions may vary +/- 1/2" and are subject to change. No responsibility is assumed by Randolph Morris.

Proposed Bathroom Alteration Plan, Scale 1"=3'

