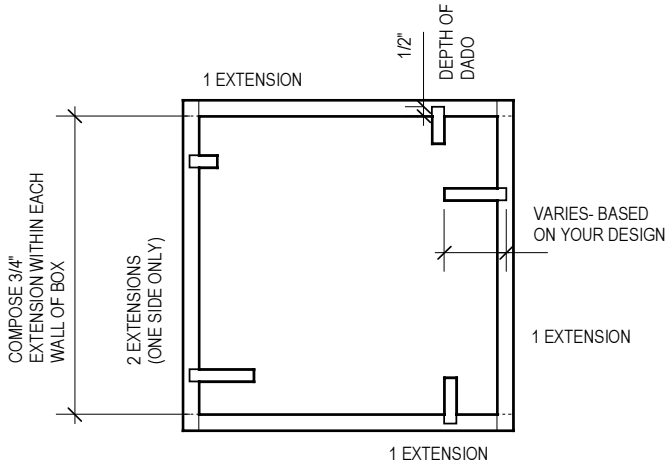# first year: wood fabrication project
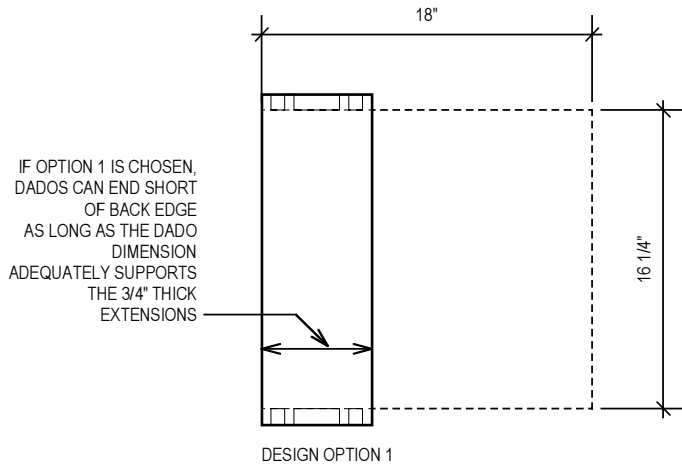
A volume of cubic space: Step Two
Reference step one for more information
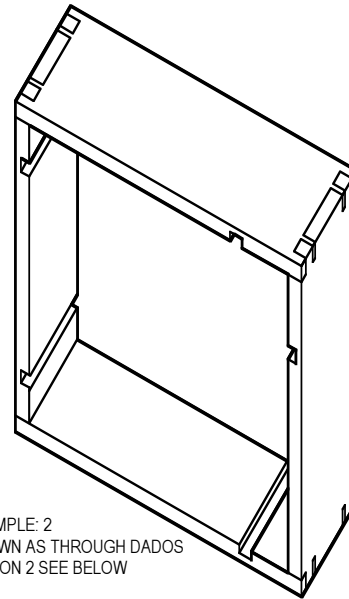
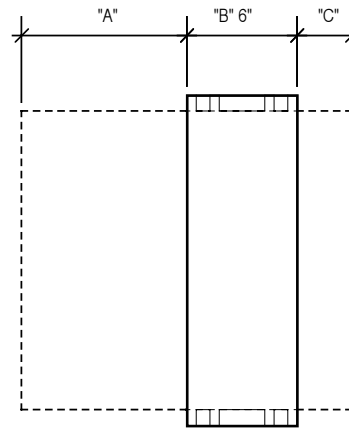|	
Issued	Friday, October 5, 2007
Objective	This semester's project will be directly linked to the studio concepts learned throughout the semester. Ideas such as volume, implied spatial definition, hierarchy, cartesian axes, primary/ secondary spaces, composition, proportion, consistency and articulation will be explored in the development of a cubic volume of space.* This cube of space should apply the ideas and spatial techniques already learned as well as the ones you will be learning in the coming weeks. *excerpt from step one issued on September 12
Working Process	For this part of the shop project you are to design and compose five (5) 3/4" thick extensions which originate from the 18" x 18" x 6" frame. These extensions, along with the aid of a series of planes made of the remains of your 2x4 (in 1/4" & 1/2" thick nesses) as well as one (1) 18" x 18" x 1/2" sheet of plywood, one (1) 18" x 18" x 1/4" sheet of plywood, and the original frame, are to define a 18" x 18" x 18" cubic volume. These planes as well as defining the cubic volume, should also create one major, and three minor spaces within the cube. See the included diagrams and drawings for more information.
Method / Process	• Planes must be simple rectangles with all edges parallel and perpendicular to the sides of the cube. • Planes cannot extend beyond the surface of the cube. In fact they should help to define it.
Materials	Wood pencils Tracing paper (12" x 12" sheets) Chipboard & corrugated cardboard (1/2 X models) modeled to approximate thicknesses Elmer's glue Corrugated cardboard (1X mock-up) modeled to approximate thicknesses Tape & hot glue
Upcoming Steps	Later you will be asked to consider notches and reliefs within the 18" x 18" x 6" frame to define the spatiality of the internal volumes defined by the planes. In addition to this, circular holes will be introduced through subtraction to create spherical and cylindrical volumes within the composition.
Due	Monday, October 8, 2007 @ 1.30 p.m.(study model #1) @ 1/2 X Friday, October 12, 2007 @ 1.30 p.m.(study model #2) @ 1/2 X & sketches Wednesday, October 17, 2007 @ 1.30 p.m. (a cardboard mock-up of design taped in place within wood frame)

1 EXTENSION

1/2"

DEPTH OF DADO

COMPOSE 3/4" EXTENSION WITHIN EACH WALL OF BOX

2 EXTENSIONS (ONE SIDE ONLY)

VARIES- BASED ON YOUR DESIGN

1 EXTENSION

1 EXTENSION

EXAMPLE: 1
3/4" CUBIC EXTENSIONS WITHIN 18" X 18" BOX
(3) SIDES ALLOW ONLY ONE 3/4" EXTENSION &
(1) SIDE ALLOWED TWO 3/4" EXTENSIONS

EXAMPLE: 2
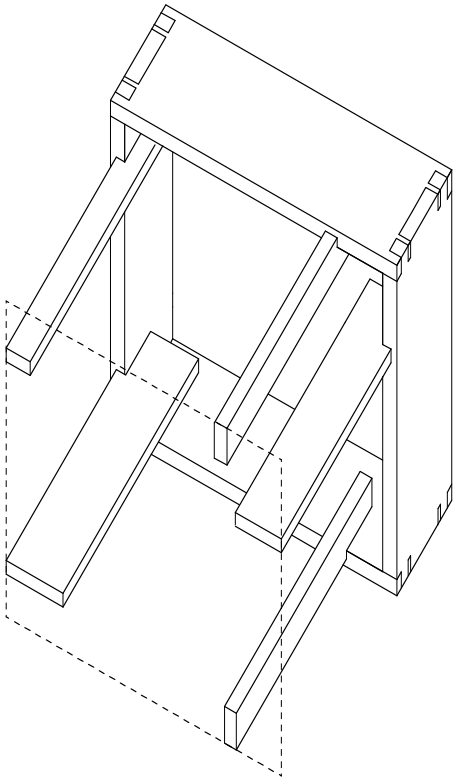SHOWN AS THROUGH DADOS
OPTION 2 SEE BELOW

18"

16 1/4"

IF OPTION 1 IS CHOSEN,
DADOS CAN END SHORT
OF BACK EDGE
AS LONG AS THE DADO
DIMENSION
ADEQUATELY SUPPORTS
THE 3/4" THICK
EXTENSIONS

DESIGN OPTION 1

"A"   "B" 6"   "C"

A & C CAN BE ANY DIMENSION AS
LONG AS THE AGGREGATE OF A,B
& C DOES NOT EXCEED 18"

DESIGN OPTION 2

EXAMPLE 3A: SHOWING 3/4" CUBIC
EXTENSIONS WHICH ARE TO DEFINE THE
CUBIC CONTAINER
"SHOWN WITHIN PARTIAL DADOS"
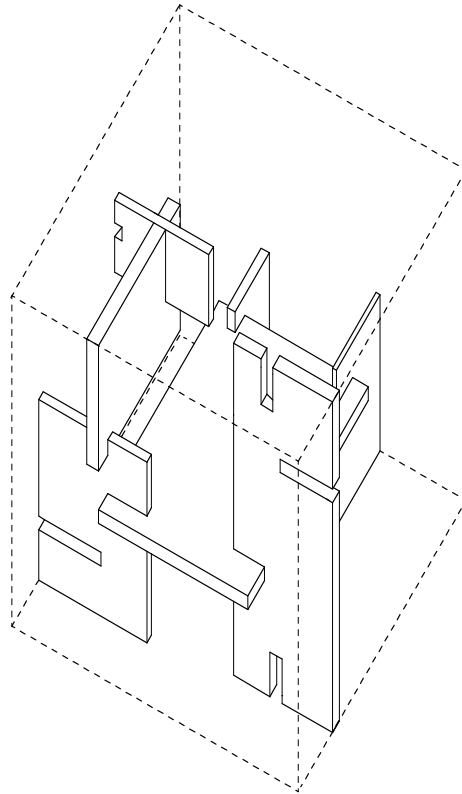
EXAMPLE 3B: INTERNAL PARTITIONS
MAKING UP A MINIMUM OF FOUR INTERNALLY
DEFINED SPACES. IN ADDITION, THESE PLANES
ARE TO HELP DEFINE THE CUBIC CONTAINER.

PARTITIONS ARE TO BE MADE FROM:

1. REMAINING 2X4s (AS 1/4" AND 1/2"
THICKNESSES)

2. FROM 1 SHEET OF 18" X 18" X 1/4" TK.
PLYWOOD

3. FROM 1 SHEET OF 18" X 18" X 1/2" TK.
PLYWOOD
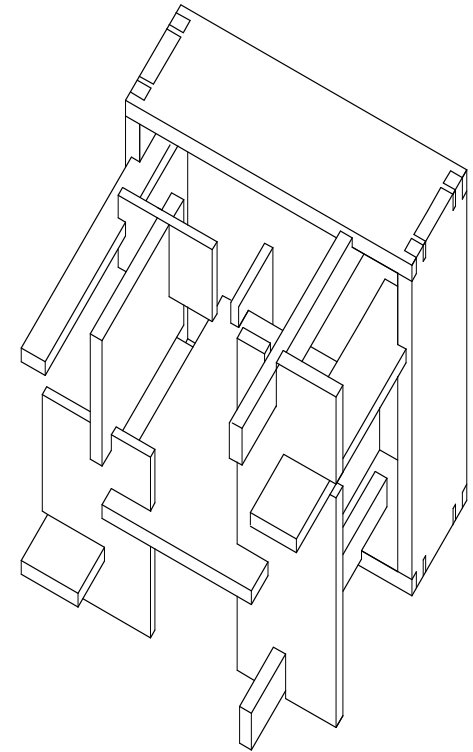
EXAMPLE 3C: SHOWING INTERNAL PARTITIONS
WITHIN THE 3/4" CUBIC EXTENSIONS

UPCOMING FINAL OPERATIONS :

1. CONTINUING TO DEFINE EACH SPACE
THROUGH NOTCHING AND RELIEF OF THE 18" X
18" X 6" BOX

2. INTRODUCING SPHERICAL AND CYLINDRICAL
SPACES WITHIN THE COMPOSITION

3. FINISHES