


# **PRINCIPLES OF DESIGN FOR FOOD SERVICE**

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**THE EVANS GROUP LLC**

# RESTAURANTS: DESIGNED FOR SUCCESS?

## FINDING QUALIFIED DESIGN PROFESSIONALS

- Architects & Interior Designers: Expertise Varies Widely
  - Food Service Consultants: Skilled at Back-of-the – House
  - Restaurant Chains w/In-House Design Departments
  - Food Service Equipment Dealers
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# SPACE PLANNING: FORM FOLLOWS FUNCTION

*BACK OF THE HOUSE FIRST!*

An Attractive Interior Is No Guarantee of Success  
if Service is Slow or Inefficient!

Data Required to Begin the Planning Process:

- Menu
- Type of Service Desired: Quick-Serve, Fast Casual, Fine Dining, etc.
- Number of Seats Desired
- Architectural Base Plan of Space
- Equipment Listing or Knowledge of Proper Equipment Specification for Application

# PLANNING BASICS

Treat the Dining Room as the Sales Floor; the Kitchen as the Factory!

- TO SATISFY CUSTOMERS, THIS FACTORY'S PRODUCTS (FOOD) MUST BE DELIVERED TO THE RIGHT PLACE (TABLE), AT THE RIGHT TIME, AT THE RIGHT TEMPERATURE, WITH MINIMAL DISTURBANCE TO OTHER DINERS. A GOOD PLAN IS ESSENTIAL.
- CONSIDER THE RESTAURANT (\*) A PRODUCTION LINE, IN WHICH EACH STAGE OF THE OPERATION IS LAID OUT IN CORRECT ORDER.
- "RULE OF THUMB": USUALLY ABOUT ONE-THIRD OF THE TOTAL SQUARE FOOTAGE OF A RESTAURANT SHOULD BE ALLOCATED FOR THE KITCHEN!

(\*) THE TERM RESTAURANT IN THIS PRESENTATION REFERS TO ANY FOOD SERVICE OPERATION , INCLUDING HEALTH CARE, B & I, INSTITUTIONAL, ETC.



# KITCHEN SIZING “RULES OF THUMB”

## BACK OF THE HOUSE (KITCHEN)

Deluxe: 7 to 10 square feet per seat


Medium: 5 to 9 square feet per seat

Banquet: 3 to 5 square feet per seat


(Add the banquet requirement to the kitchen.)

3. Food prep is approximately 50 percent of the back of the house.
4. Storage is approximately 20 percent of the back of the house.
5. Warewashing is approximately 15 percent of the back of the house.
6. Waitstaff circulation is approximately 15 percent of the back of the house.
7. Work aisles 36” wide
8. Work aisles with crossing traffic minimum 48” wide; preferably 54”-60”

# RECEIVING, STORAGE, JANITORIAL, OFFICE

1. Receiving Entrance / Trash Exit
    - a. Recycling/Trash collection near back door
    - b. Janitorial Sink and Chemical Storage
    - c. Employee lockers
    - d. Employee Restroom if required by City Code
  2. Dry and refrigerated storage near receiving entrance for convenience
  3. CO 2 and bag-in-the-box storage
  4. Office or manager's desk area required by some—optional for others
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# PREP AND PRODUCTION

1. **PREP AREA** for fresh foods and baked items
    - a. Located adjacent to bulk dry and refrigerated storage
    - b. Typical equipment includes tables, prep sinks, mixers and dough equipment, can racks, can openers, food processors, shelving for pan storage, sheet pan racks for transporting prepped product back to coolers or up to production line, hand sinks located per local health codes
  2. **MAIN KITCHEN / PRODUCTION AREA**
    - a. Located between prep and finishing areas
    - b. Equipment can include ranges, ovens, fryers, kettles, braising pans, sinks, tables, access to refrigerated prepped product, pan and utensil storage, hand sinks accessible per health codes
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# FINISH, ASSEMBLY, SERVING/PICK-UP

1. Finishing includes the final cooking required just before serving, as well as plating cooked foods, saucing, garnishing, placing into a (heated) pick-up area.
  - a. Equipment can include broilers, rapid-cook ovens, microwaves, steamers, grills, fryers, soup wells, as well as heated or refrigerated holding tables, dish storage, serving shelf and food warmers
  - b. Some concepts require that the final plate check and garnishing is done by an expeditor or waitstaff, who also garnishes the plate before delivery.
2. Pick-up area for either server or guests, located as closely as possible to the finishing and serving area to ensure hot foods are hot when delivered to customer, with minimal traffic congestion at the pick-up station.



*Important Sales Tip: Check competitor's plans for deficiencies in traffic flow!!*

# ICE, BEVERAGE, BARS AND SERVICE STATIONS

## 1. ICE MACHINE

- a. Located convenient to bar or beverage stations for re-fill
- b. Positioned out of main traffic flow to minimize slipping on spilled ice

## 2. BEVERAGE AND SERVICE STATIONS

- a. Large dining spaces may require remote stations for speed of service
- b. Service stations, if required, should be located discreetly in FOH to facilitate drink replenishment to enhance dining experience
- c. Soft drink systems require special planning and installation for beverage lines, carbonators and CO2: Lines can run below slab or overhead


## 3. BARS are designed for a specific number of bartenders and stations

## 4. SERVICE BARS are small-scale but full-service bars located in back-of-the-house, staff-only areas where bar service is required, but a visible bar is not required.

# **DISH ROOM / SCULLERY**


**IDEAL LY LOCATED ADJACENT TO DINING ROOM FOR BUSSING  
AND TO FINISHING/DISH-UP FOR CLEAN DISH REPLENISHMENT**

**Typical dish room equipment includes:**

- **Soiled dish drop-off table with pre-rinse sink and spray faucet**
  - **Dish machine with or without booster heater**
  - **Clean dishtable**
  - **Vent hood as required by Code**
  - **Hand sink**
  - **Dish rack storage**
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# FRONT-OF-THE-HOUSE (FOH) PLANNING


## BAR: PRODUCTION AREA LOCATED IN THE PUBLIC SPACE

- Location is KEY to maximize drink sales!
  - Must be visible and highly accessible to public
  - Location easily accessed for beer, liquor and ice replenishment
  - Ideal waitstaff pickup station out of public traffic area
  - Drink menu is key to proper space planning inside the bar
  - Equipment layout determined by number of bartenders
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# DINING ROOM PLANNING

## SQUARE FOOTAGE REQUIREMENTS PER DINER, INCLUDING TABLE, CHAIR, AISLE

### “Rules of Thumb”

- Allow 15 – 20 sq. ft. per person for spacious dining
  - Allow 12 - 18 sq. ft. per person for cafeteria or standard restaurant
  - Allow 10 - 15 sq. ft. per person for banquet, institutional or tight seating
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# SEATING & TABLETOP SPACE REQUIREMENTS

- ❑ Allow 18 inches from edge of table to back of chair when a person is seated
- ❑ Allow 24 inches left-to-right for each person seated at a bar or counter
- ❑ Industry standard for adequate tabletop room is 300 square inches per diner.
  - a. Average tabletop size for fast food is 30" x 42", or 1260 square inches
  - b. Divide area (1260 sq. in.) by 300 required per diner = 4 diners
  - c. Other factors to consider: menu & dining style. Cafeterias and family-style restaurants require larger tables to handle trays and lots of dishes.

## FLOOR PLAN GUIDE

All suggestions given are approximate and minimum. It should be pointed out that no rule of square feet per person can be exact, because too many variables exist. The space consumed by entry and kitchen door aisles, for example, is almost equal in a room of 800 square feet and a room of 1600 square feet, but the percentage of the room used is less in the latter. Seating capacities can be determined only by a final layout, but the approximate capacity of a room can be determined by this rough guide:

Banquet or institutional seating: 10–12 square ft. per person

Cafeteria or lunchroom seating: 12–14 square ft. per person

Fine dining: 14–16 square ft. per person

### SUGGESTED TABLE SIZES:

	<b>Banquet Institutional</b>	<b>Lunchroom Cafeteria</b>	<b>Fine Dining</b>
2 persons	24" x 24"	24" x 30"	24/30" x 30/36"
4 persons	30" x 30"	30" x 30"	36" x 36" or 42" x 42"
4 persons	24" x 42"	24/30" x 48"	30" x 48"
6 persons	30" x 72"	30" x 72"	48" diameter
6 persons	30" x 96" or 60" diam.	30" x 96"	60/72" diameter
10 persons	72" diameter	30" x 120"	96" diameter

Note: In self-bussed tray service cafeterias, tables should be of adequate size to accommodate the trays.

## **SUGGESTED MINIMUM AISLE DIMENSIONS:**

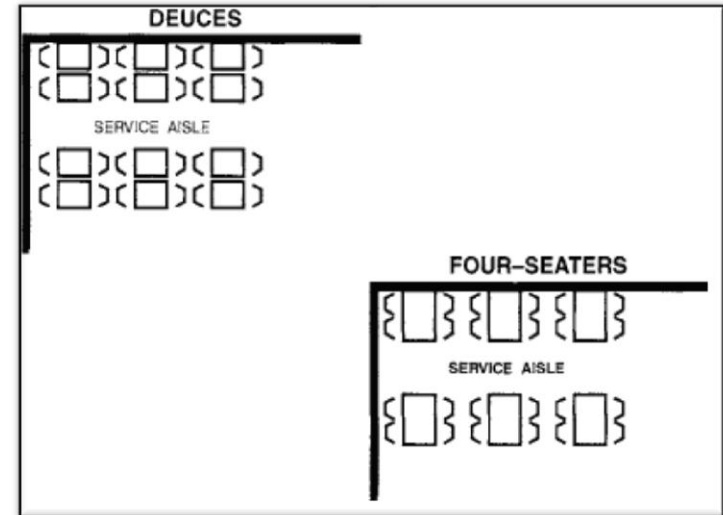
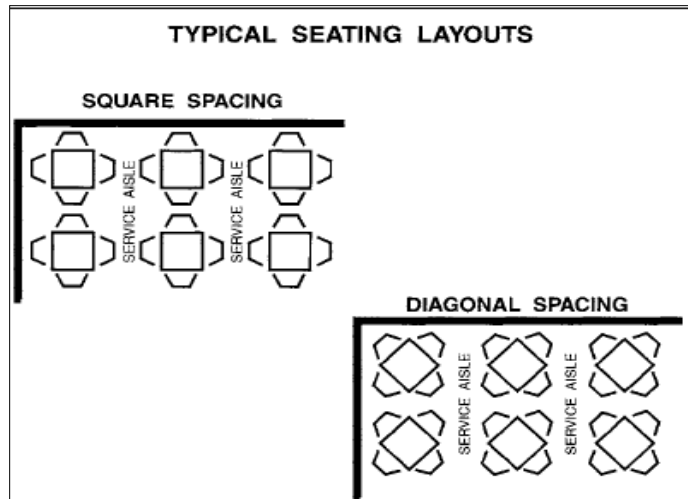
	<b>Customer Access Aisles</b>	<b>Service Aisles</b>	<b>Main Aisles</b>
Institutional Banquet	18"	24/30"	48"
Lunchroom Cafeteria	18"	30"	48"
Fine Dining	18"	36"	54"

Note: Allow 18" from edge of table to back of chair in use. For diagonally spaced tables, allow 9" more between corners of tables than needed for the type of aisle needed (e.g., for 30" service aisle, allow 39").

As rough rules of thumb, remember that tables laid out diagonally will increase seating capacity, and a smaller quantity of tables with greater seating per table increases seating capacity but reduces flexibility.


- **Main aisles are those that accommodate host & guest traffic to & from dining areas, bar, restrooms.**
- **Service aisles in restaurants with wait staff should be 36" wide with no seats encroaching.**

# CUSTOMER AND SERVICE AISLES



- Minimum of 42" between squared tabletops allows 6" for each guest back-to-back to push out.
- Minimum of 60" between squared tabletops allows 24" service aisle between seated guests.
- Allow 24"-30" between corners of diagonal tables for customer aisle or narrow service aisle (chairs will encroach on aisle).
- Main service aisles should be 36" wide with no seats encroaching.

# PLANNING FOR THE CUSTOMER'S EXPERIENCE

- ❑ Goal is to accommodate the greatest number of people without crowding.
  - ❑ Well-designed combination of table sizes can decrease wait time for diners.
  - ❑ Multiple table sizes and shapes makes the dining room more interesting, and can give individual areas a more intimate feel without actual physical barriers
  - ❑ Smooth traffic flow minimizes congestion, noise and accidents, to enhance customer experience.
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# FURNITURE SPECIFICATION

## Dining Table Selection: Quick-Serve

- Fast Food Table Sizes

Sizing based upon food served in disposable wrappers, on fast-food trays approx. 10" x 14"

- ✓ 24" x 24" or 30" x 24" = deuce (table for 2)
- ✓ 30" x 30" = free-standing table for 4
- ✓ 24" x 42" = free-standing or booth table for 4
- ✓ 30" x 42" = free-standing or booth table for 4
- ✓ Rounds seldom used because they waste space

# FURNITURE SPECIFICATION - CONTINUED

- DINING TABLE SELECTION: Fast Casual
- Tables sized based upon either disposable or reusable dinnerware, limited pieces, with or w/o tray
- ✓ 30" x 24" Deuce tops- booth or free-standing
- ✓ 30" x 42-48" Four-tops – booth or free-standing
- ✓ 36" x 36" Four-tops – free-standing

*For maximum flexibility in seating, select one common width for tables that will be moved together for larger groups!*

# FURNITURE SPECIFICATION – CONTINUED

## DINING TABLE SELECTION : Fine Dining

Tables sized to accommodate several pieces of china, full flatware place settings, linens, multiple pieces of glassware per patron

- ✓ 36" x 36" = Freestanding 4-top
- ✓ 30" x 30" or 30" x 36" = Table for 2
- ✓ 30" x 48" – 30" x 54-60" Booth table for 4
- ✓ 36" x 36" drop-leaf becomes 51" round" Seats 6
- ✓ 48" round seats 6
- ✓ 60" round seats 8

# SEAT VERSUS TABLETOP HEIGHT

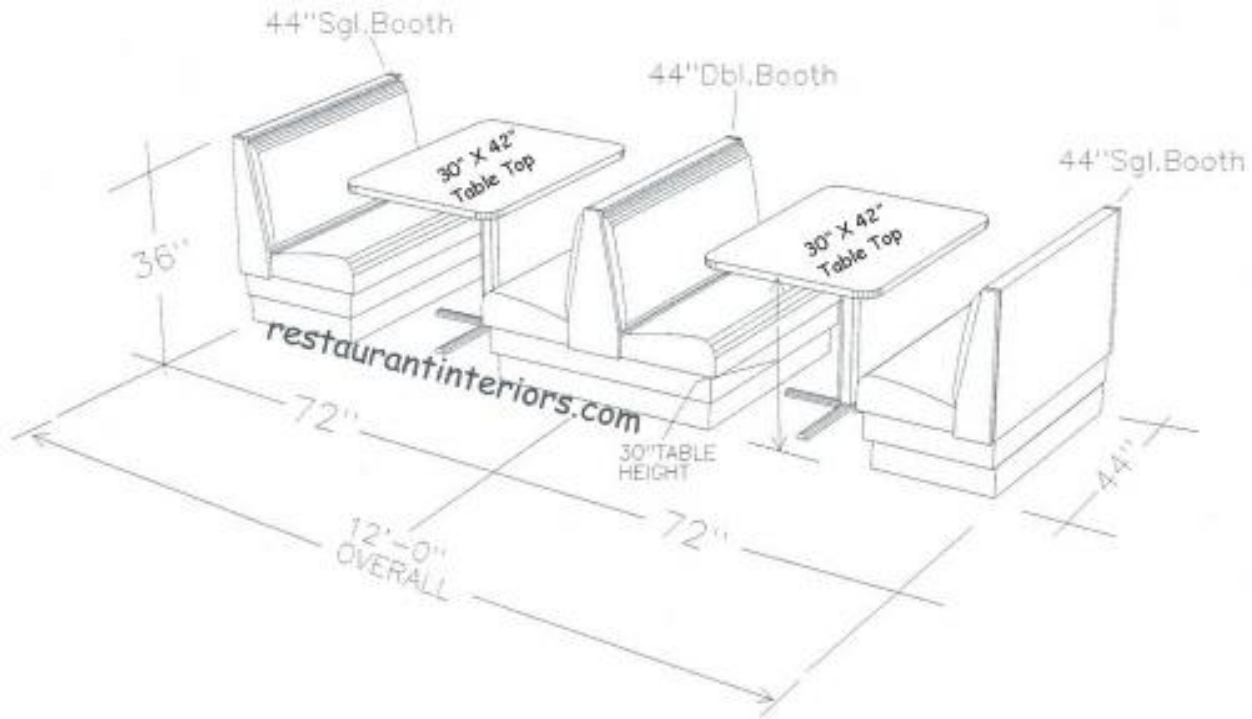
- Standard dining table height is 30”.
- Standard dining chair seat height is 18”
- Standard Bar Height is 42”.
- Standard Barstool Seat height is 30”
- “Counter Height” is 36”
- “Counter Stool Seat height is 24”.
- ✓ *Rule of Thumb: Always keep 12” difference between the height of the chair seat and the height of the top.*

# BARSTOOLS VS. COUNTER STOOLS

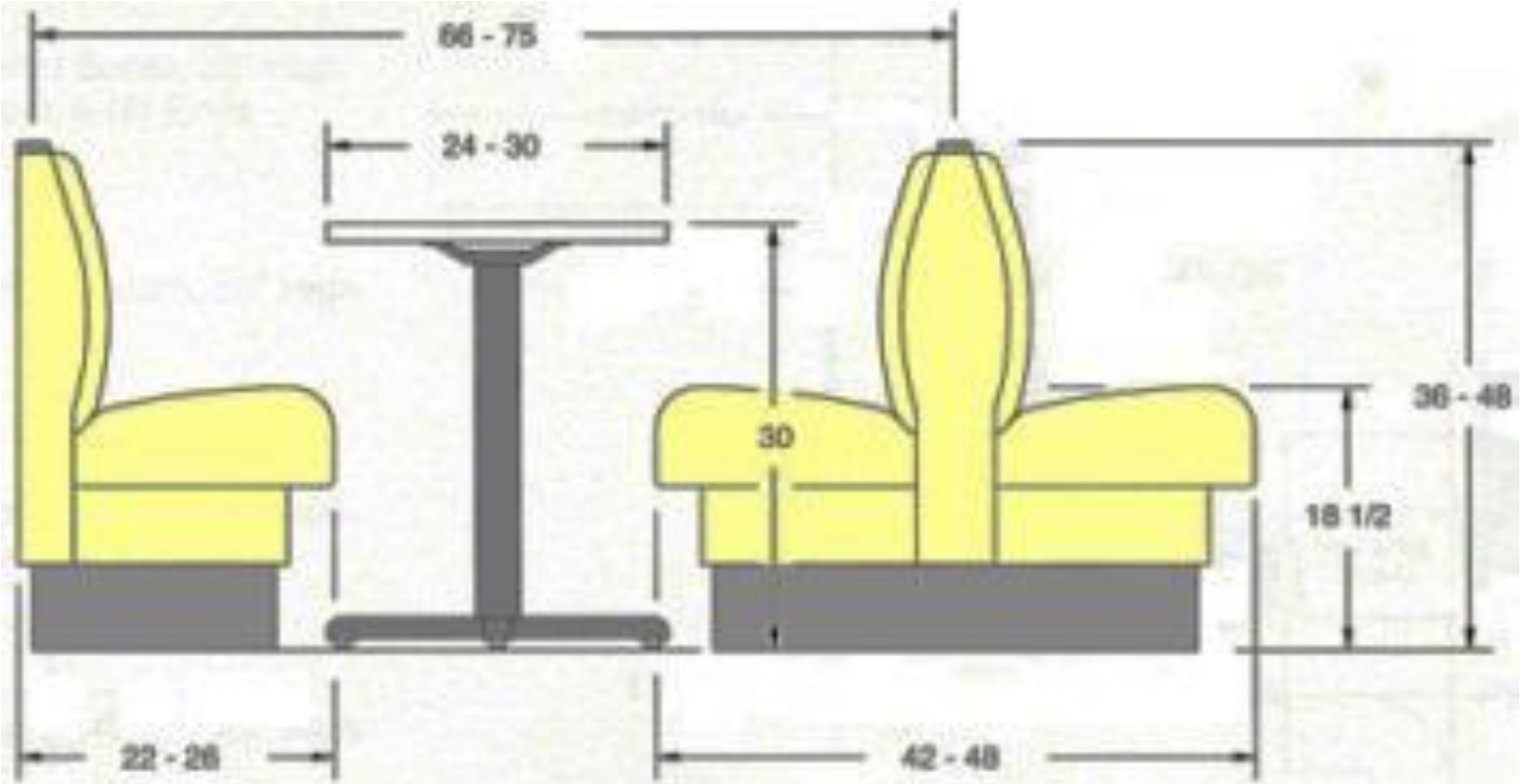


# FURNITURE SPECIFICATION - CONTINUED

## BOOTHS: Typical Spacing



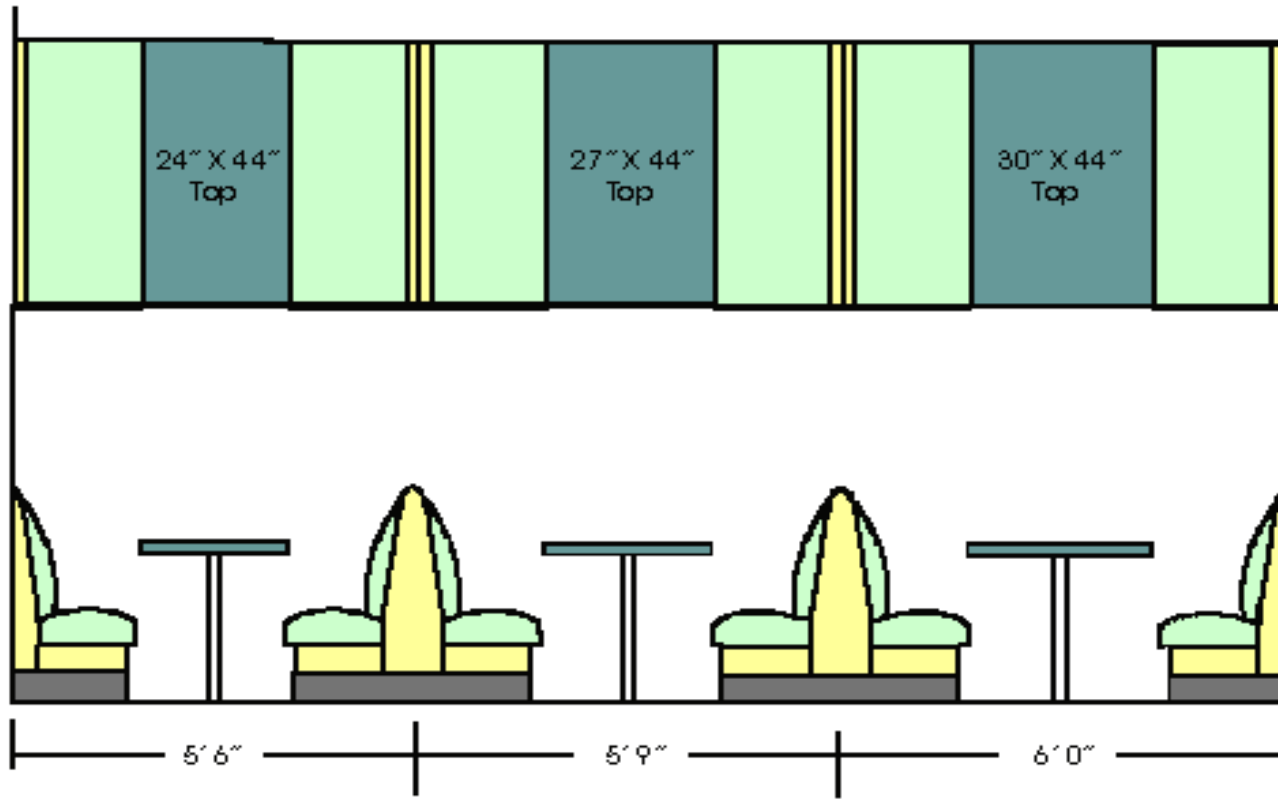
# BOOTH DIMENSIONS - TYPICAL




# BOOTHS - CONTINUED

- Upholstered booths can be spaced 72” center-to-center, as shown, with a 30” wide dining table for maximum guest comfort..
- Where space is at a premium, upholstered booths may be spaced at 69” center-to-center, with a 27” wide table. This provides the same spacing for the guest with a narrower table top.
- In fast-food applications, booths can be 66” on center with a 24” wide tabletop. Best with a molded plastic laminate or fiberglass booth.

# BOOTH SPACING – TYPICAL VARIATIONS



# BOOTHS - CONTINUED

- Standard back height on many booths is 36”
  - For more private and intimate feel, specify 42”-48” high
  - For max. cleanability of upholstered booth, recommend a vinyl seat covering; consider a crumb strip
  - To add color and pattern, use woven fabric on back only. Tufting typically adds durability, vs. a ‘tight back’.
  - Removable seat cushion is a selling point; if seat gets damaged, operator only has to re-cover seat
  - Finished ends and outside backs are usually OPTIONAL!
  - Banquettes are long ‘single booths’ or benches.
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**Booths with upholstered crumb rails**





**Removable seat on booth (banquette)**

# BOOTHS WITH CONTRASTING BACK FABRIC



# SPECIFY BOTH FINISHED ENDS WHERE NEEDED

One is standard—two is an option!!



# FINISHED OUTSIDE BACKS—OFTEN OPTIONAL!



Check with manufacturer to make sure you are 'covered'!

# Creating a memorable restaurant interior experience

*The diners' experience must include  
sight, sound, touch & taste*

- o Dining is more than eating out: it's a form of entertainment
- o Cater to the taste of the target market
- o Owners need to decide exactly what they are offering, and to whom
  - ✓ Exciting, stimulating, fun atmosphere
  - ✓ Relaxed and soothing environment

## **Create a vision!**

- o Casual or formal? Who are target customers?
- o Upscale, midscale or budget? What kind of ambience?

# CREATE MEMORABLE DINING EXPERIENCES



# Design for functionality

- o Kitchen and bar must work together
- o Create easy traffic flow for food from pickup to delivery at table
- o Kitchen flow: Food must move from receiving to serving easily

## Maximize the vision by making all elements work together in harmony

- o Unify with Color
- o Unify with Materials
- o Unify with Texture
- o Unify with Style
- o Unify with Theme



# FUNCTIONAL AND VISUALLY SATISFYING FLOW




# Capitalize on Color as Ideal Backdrop for Dining

- Spicy foods may be best enjoyed amid bright colorful rooms of red, yellow, orange
- Blues and greens are typically used in a fast food or fast casual seafood restaurant
- Neutrals and softer colors are usually acceptable in a mainstream menu setting, such as a coffee shop or family restaurant
- Dramatic shades of black, silver and grey are the foundation of a sophisticated setting such as a night club or upscale restaurant
- *If the food is beautiful, let the food be the star!!*



# USING COLOR & TEXTURE TO SET THE MOOD



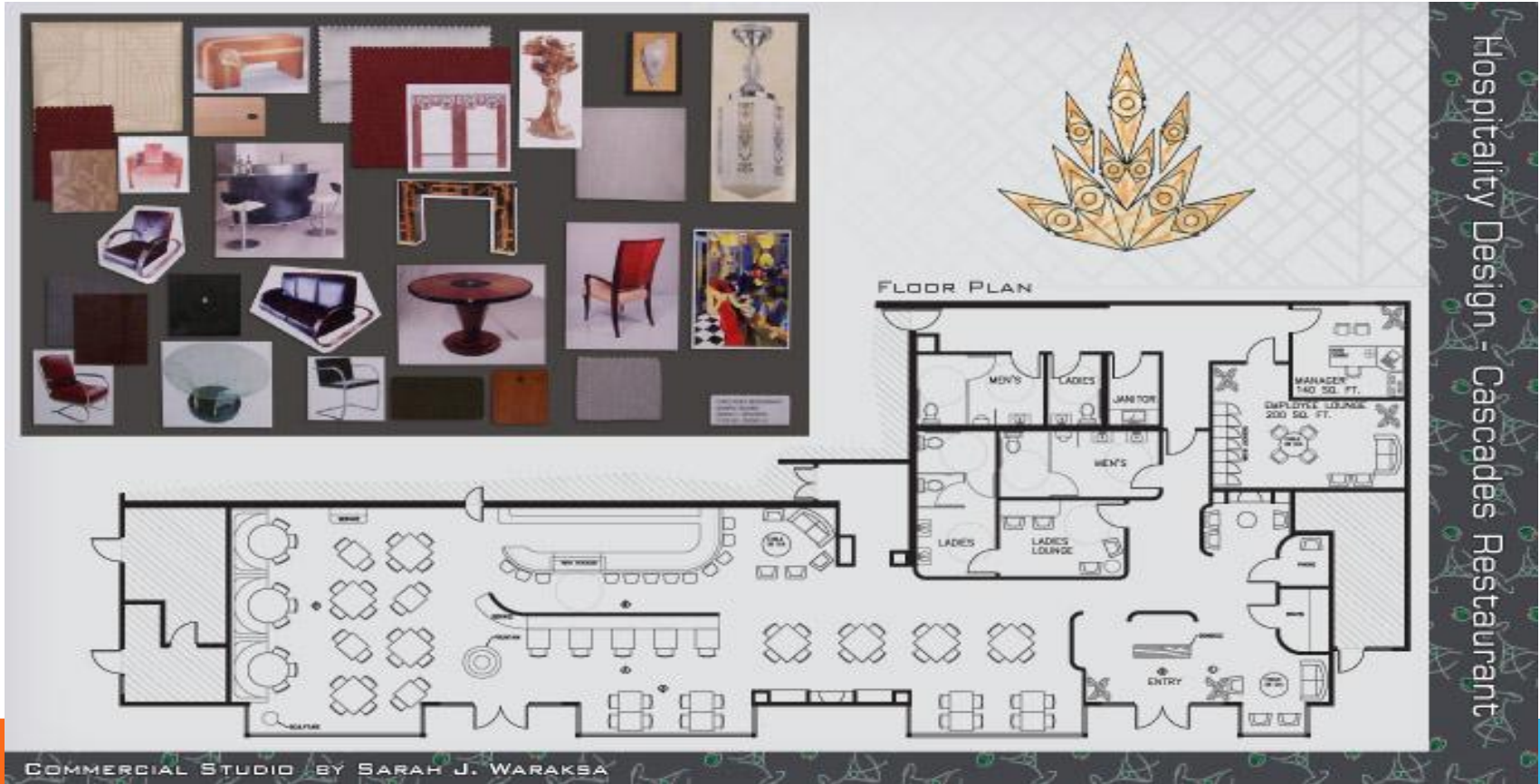
 ACityDiscount

Understated elegance

Uniquely bright and bold



# HAVE FUN SELLING—SET YOURSELF APART WITH DESIGN!



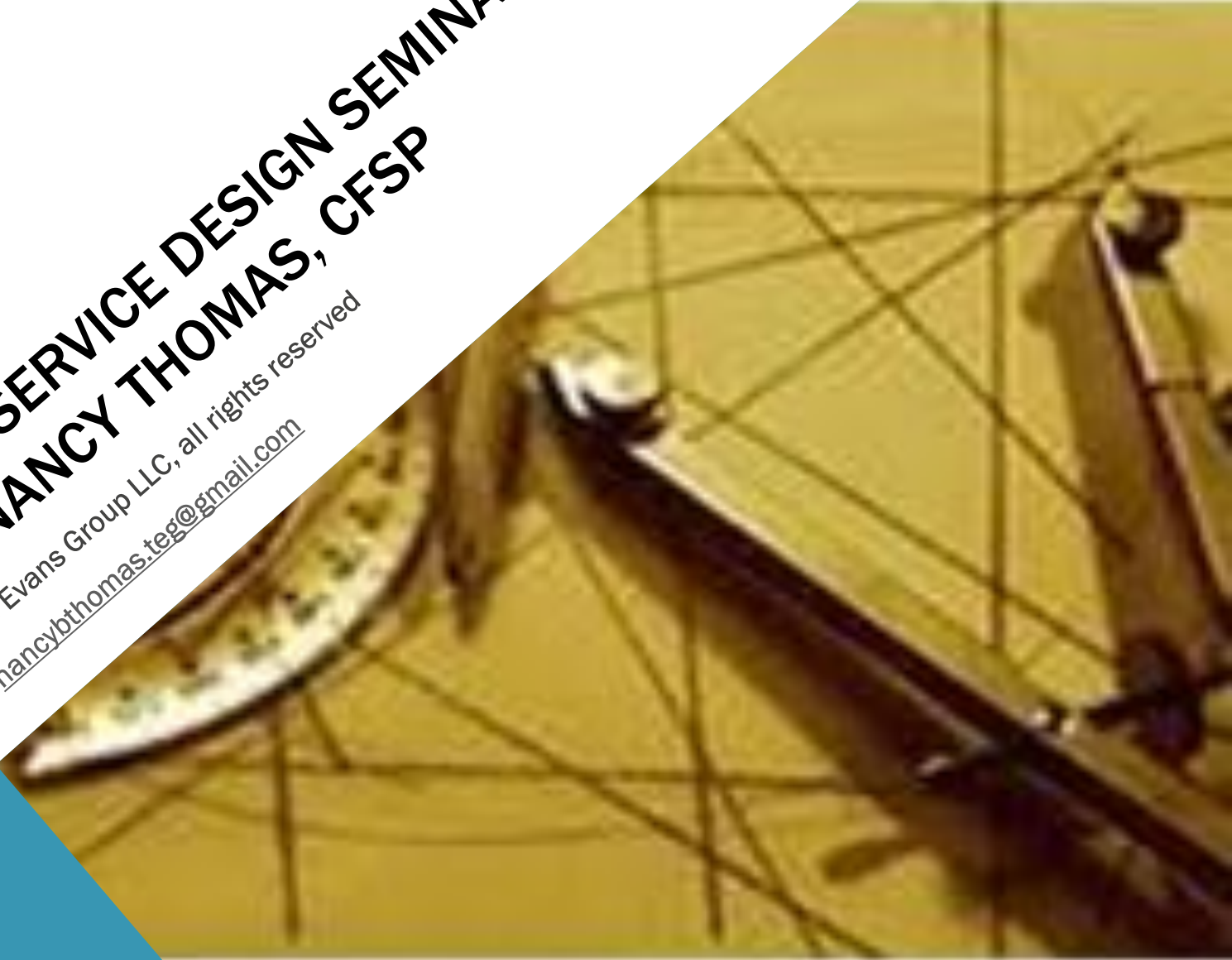
Hospitality Design - Cascades Restaurant

COMMERCIAL STUDIO BY SARAH J. WARAKSA

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